

THE SHIFTING AND INCIDENCE
OF TAXATION



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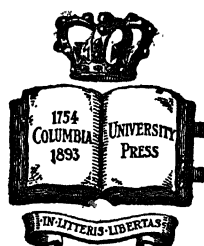
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PREFACE TO THE SECOND EDITION

IN this edition so many changes have been made as to constitute practically a new volume. The alterations and additions are to be found in both the historical and the positive parts. A more careful study of the early English literature brought to light so much interesting material on the theory of taxation that the entire Book First of Part One has been devoted to it; whereas, in the earlier edition, the whole period was passed over in a few pages. This book is therefore substantially new. In the Second Book a chapter has been added on the Physiocrats, the last chapter on the Mathematical Theory has been rewritten, and considerable additions have been made to some of the other chapters. In Part Two, devoted to the Positive Theory, a chapter has been inserted on the general principles, chapter five has been entirely rewritten, chapter seven has been amplified by a closer study of import duties and stamp taxes, and chapters two and three have been enlarged and amended. The whole work has been so completely revised that scarcely a single page will be found the same as in the first edition. Finally, a bibliography and an index have been added. It is hoped that these changes will ensure for this new edition a reception as favorable as that which has been unexpectedly accorded to the original work.

In preparing this edition I have received great help from my colleagues. Professors John B. Clark and Richmond

Mayo-Smith have aided me with valuable criticisms. To Mr. Arthur M. Day I owe much for helpful suggestions in detail as to both matter and form from the beginning to the close of the work. From other friends also I have derived assistance. Professor Ross of Leland Stanford University and Professor Hull of Cornell University have laid me under obligations by calling attention to desirable changes and additions in the text. Professor Marshall of Cambridge and Professor Edgeworth of Oxford have been kind enough to point out some blemishes and possible improvements. Finally, Mr. George W. Morgan has undertaken the very arduous task of aiding me to read the entire proof.

EDWIN R. A. SELIGMAN.

COLUMBIA UNIVERSITY, N.Y.,
December, 1898.

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INTRODUCTION

THE problem of the incidence of taxation is one of the most neglected, as it is one of the most complicated, subjects in economic science. It has indeed been treated by many writers; but its discussion in scientific literature, as well as in everyday life, has frequently been marked by what Parieu calls the "simplicity of ignorance." Yet no topic in public finance is more important; for, in every system of taxation, the cardinal point is its influence on the community. Without a correct analysis of the incidence of a tax, no proper opinion can be formed as to its actual effect or its justice. It is, therefore, time for an attempt to be made not only to pass in review the theories hitherto advanced, but to contribute to the solution of some of the theoretic problems while paying special attention to the practical aspects of the discussion.

A word first as to the terminology. In the process of taxing, we must distinguish three conceptions. First, a tax may be imposed on some person; secondly, it may be transferred by him to a second person; thirdly, it may be ultimately borne by this second person or transferred to others by whom it is finally assumed. Thus the person who originally pays the tax may not be the one who bears its burden in last instance. The process of the transfer of a tax is known as the *shifting* of the tax, while the settlement of the burden on the ultimate taxpayer is called the *incidence* of the tax. The incidence of the tax is therefore the result of the shifting, and the real economic problem lies in the nature of the shiftings.

The English language is unfortunately deficient in its nomenclature. While *incidence* conveys to the mind the

notion of the ultimate result of the shifting, we have no word to express the immediate result of the original imposition of the tax. "Assessment" of the tax looks upon the process from above downward; but we lack a term to characterize the process as seen from below upward. The French and the Italians have the words *percussion*, *percussione*, to express this idea of the primary result of the assessment. They, therefore, logically term the shifting of the tax the *repercussion*¹ of taxation, the ultimate result of which is the incidence (*incidence*, *incidenza*). But, in using English, we must content ourselves with the awkward term "original incidence," while "incidence," when used alone, technically means the ultimate incidence, or the result of the intermediate process. But the incidence—the result—must never be confounded, as is often the case, with the shifting—the process.

The shifting of a tax, moreover, must not be confused with what is known as the evasion of a tax or escape from a tax. Shifting is the non-payment of a tax through a transfer of the burden to some one else; evasion is the non-payment of a tax without any transfer. A tax may be thrown off entirely without being shifted to any one. Evasion may be either legitimate or illegitimate, conscious or unconscious. For instance, through smuggling we have an illegitimate evasion, but no shifting of the tax. On the other hand, when a new tax stimulates the improvement of processes of production,—as, for example, the beet-sugar tax in Europe or the whiskey tax in America at one time,—the producer evades the tax to a certain extent, but does not shift it. This is legitimate evasion. Finally, when there is capitalization of incidence,—a process to be fully explained later, whose main feature is the fact that under certain circumstances the purchaser of a taxable object, by cutting down the purchase price, discounts the tax which he will have to pay,—there is practically an

¹ They also use the words *translation*, *traslazione*, which are the same as our "transference" or shifting. The French also speak of taxes being "*rejetés*," our "thrown off" or "shifted."

evasion of taxation, but no shifting. In this case the evasion is unconscious; in both the preceding cases the evasion was the result of a conscious effort. The distinction between evasion and shifting has puzzled many writers. We shall have occasion to revert to it constantly.

The Germans have devised a very elaborate nomenclature to distinguish the various kinds of shifting; for example, to indicate whether a tax is shifted forward from the producer to the consumer, or back from the consumer to the producer, or farther on from one consumer to another.¹ Such nomenclature is impossible in English. Moreover, not only is it of little importance, but scarcely any two writers use the terms in precisely the same way. Above all, the rather fine distinctions have served merely to bring about a confusion between evasion and shifting.

Another fertile source of error is the distinction between the shifting of a tax and the incidental burden which may rest on the shifter. When we consider, for instance, the shifting of a tax as between buyer and seller, or between producer and consumer, the question that concerns us is: Will the price of the article be raised by the imposition of the tax? If the price is raised, we say that the tax is to that extent shifted. But even a complete shifting of the tax does not necessarily mean an entire absence of loss to the seller. Thus, it usually happens that an increase of the price of a commodity leads to a decrease in sales; and it may happen that these decreased sales, even at higher prices, may yield less total profits than before. In such a case, not only does the buyer pay the tax, but the seller also suffers a loss, even though the tax has been shifted completely. The study of shifting, it is evident, concerns itself primarily with the extent to which a given tax, received by the government, is divided between the parties in question. It does not seek to

¹ The German terms are *Abwälzung*, *Fortwälzung*, *Rückwälzung*, *Weiterwälzung*, and the general term *Ueberwälzung*. Their *Abwälzung* is nothing but our "evasion," and is not a form of shifting at all. Some writers, however, — Roscher, for example, — use "*Abwälzung*" to denote shifting in general. There is no uniformity in the usage.

exhaust the problem of the incidental or additional burdens which may result from the tax.

Finally, we must not confound the incidence with the effect of taxation. A tax may have a great many effects. It may diminish industry and impoverish individuals; it may stimulate production and enrich individuals; it may be an unmitigated curse to society; it may be a necessary evil; it may be an unqualified boon to the community regarded as a whole. With none of these problems does the student of incidence busy himself. All that he has to investigate is the question: On whom does the tax ultimately fall? When we once know this, we can then proceed to the further discussion of the effects produced by the pressure of taxation on the various classes or individuals. The shifting is the process; the incidence is the result; the changes in the distribution of wealth are the effect.

The discussion of incidence thus depends entirely on the investigation of the shifting of taxation. The real problem before us is to ascertain the conditions according to which a tax is shifted onward, backward, or not at all. Only when we understand whither, why, and how a tax is shifted, can we discover its actual incidence. In the following pages an attempt will be made to attack the problem by first giving a detailed critical history of the doctrine, and then taking up the positive theory itself. In the second part it will be convenient to begin with a statement of some general principles, to follow this with a consideration of the chief separate taxes, one by one, and to close by drawing the general conclusions applicable to the science of public finance.

PART I

THE HISTORY OF THE DOCTRINE OF
INCIDENCE

GENERAL SURVEY

THE writers on the shifting and incidence of taxation,¹ like those on almost all other economic topics, may be broadly divided into two classes, marked off from each other by the period in which the theory of distribution was formulated by the Physiocrats and Adam Smith. The doctrine enunciated by the first class of writers — almost exclusively English — may be summed up under the head of "The Early Theories."

The English literature on taxation, prior to Adam Smith, begins at about the middle of the seventeenth century. For somewhat more than a hundred years, the theories on the incidence of taxation are found, with a few important exceptions, in occasional pamphlets written to advocate or to oppose practical measures of reform. It was not until a few decades before Adam Smith that a consideration of the general theory of incidence assumed a more prominent place in the treatises on economic topics. The propositions of the statesmen as well as of the pamphleteers of the earlier period rest, however, on more or less definite theories of incidence.

¹ The only works which contain a history of the theory of incidence are the German works of J. Kaizl, *Die Lehre von der Ueberwälzung der Steuern*, 1882, and G. v. Falck, *Kritische Rückblicke auf die Entwicklung der Lehre von der Steuerüberwälzung seit Adam Smith*, 1882. Both these works deal only with the modern theories, and even for this period they are inadequate. Whole classes of authors are omitted, among them some important ones. Each work is chronological, and makes little attempt to analyze the theories according to schools. Falck is richer in the account of the early German writers. Kaizl is better acquainted with several of the French authors, although he omits some of the most noteworthy. Both neglect the English authors, with the exception of Smith, Ricardo and Mill, and ignore the Continental and American writers. Falck is almost without any positive ideas at all, while Kaizl adheres so closely to one or two German predecessors that his own constructive work is slight. Both books are, however, to be recommended as the only ones that we possess on the subject. The abler work, originally written as a doctor's dissertation, is that of Dr. Kaizl, who has since then attained a prominent position as professor in the University of Prague, and as author of numerous economic treatises in Bohemian, and who now (1898) occupies the post of Minister of Finance in the Austro-Hungarian monarchy.

It may conduce to clearness to classify these pioneers according to their practical inferences from the doctrine of incidence. From this point of view, the writers before Adam Smith may be divided into six categories, as follows:—

1. Those who discuss the general excise.
2. Those who favor a single tax on luxuries.¹
3. Those who favor a single tax on houses.
4. Those who favor a general property tax.
5. Those who favor a single tax on land.
6. Those who favor a more eclectic system.

This whole field of economic inquiry has thus far been so little cultivated, and many of the works referred to are now so rare that it may be wise to treat this section of the history more fully than would otherwise be permissible in a work which pretends to give only a general sketch of the historical development of the doctrine of incidence.

The views developed in the period subsequent to the Physiocrats and Adam Smith, which will be discussed in Book II. under the title of "The Modern Doctrines," are somewhat more difficult to subdivide with accuracy; for it is not always easy to draw the line sharply between writers many of whom have much in common. Nevertheless, their theories of the incidence of taxation may be conveniently classified as follows:—

1. The Physiocratic theory.
2. The Absolute theory.
3. The Diffusion theory.
 - (a) The Optimistic theory.
 - (b) The Pessimistic theory.
4. The Capitalization theory.
5. The Eclectic theory.
6. The Agnostic theory.
7. The Socialistic theory.
8. The Quantitative or Mathematical theory.

¹ The word "single" is not here used in opposition to "double." The phrase denotes a general tax on luxuries as the exclusive tax.

BOOK I

THE EARLY THEORIES

CHAPTER I

THOSE WHO DISCUSS THE GENERAL EXCISE

By the term "excise" is meant a tax on commodities, levied on the producer or the domestic dealer. It is distinct from customs duties which are levied on the importer; although, after commodities have once been imported, an internal duty or excise may also be levied on them. These internal taxes or excises are popularly supposed to be shifted to the consumer and, accordingly, while they are imposed in first instance on the producer or dealer they are commonly classed as indirect taxes on consumption. The English publicists, however, were by no means unanimous in accepting this popular view. We may, in fact, distinguish no less than four different theories as to the incidence of the excise. These theories are: —

1. That, while the excise is at first shifted from the dealers to the consumers, it will not finally rest on the poor consumers.
2. That the excise will rest on consumers in general.
3. That the excise will be shifted to the landowners.
4. That the excise will finally rest on the dealers or traders.

The earliest writers to propose a system of excises did not look much farther than the surface fact that the excise was a tax on a consumable commodity, and therefore presumably a tax on consumption. Their ideal was a tax on expenditure, and this ideal, in their opinion, could be most easily attained by a general excise. Although this project was a favorite one with many of the early authors, it gradually met with opponents as well as with adherents until, under Walpole, it

became, in the second quarter of the eighteenth century, the subject of a fierce controversy.¹

The first English writer to posit expenditure as the basis of taxation was Hobbes, in a work written shortly after the imposition of the first excise in 1643. Hobbes, like many of the later continental tax reformers, held a tax on expense to be a logical corollary of the doctrines of equality and universality of taxation. To tax property, he thought, would be to discourage thrift and to put a premium on extravagance; while, since everybody consumes something, a tax on expense cannot possibly be evaded like so many of the other taxes.² The scheme of the excise itself was soon adopted by several writers. Thus Cradock states that "the Generall Excise (so much decryed and Petitioned against) in its proper Constitution, is the most equitable of Impositions: no man being charged with it, but he that sels it for profit, to the consumption of the Commodity, who in truth pays it

¹ Those who care to go into the literary history of the controversy over the famous "excise-scheme," which was in reality no scheme for a general excise at all, are referred to the monographs of Leser, *Ein Accisestreit in England*, Heidelberg, 1875, and of Ricca-Salerno, *Le dottrine finanziarie in Inghilterra tra la fine del secolo XVII e la prima metà del XVIII*, Bologna, 1888. A list of additional contemporary pamphlets may be found in the bibliography printed by Sinclair, *History of the Public Revenue of the British Empire*, 3d ed., 1804, vol. iii, appendix, pp. 94-136. Many of the monographs discussed by Leser and Ricca-Salerno do not dwell on the question of incidence. So far as they do discuss the subject, they, as well as other works of the same period not mentioned by the German and Italian writers, will be considered in the following pages.

² "The Equality of Imposition consisteth rather in the Equality of that which is consumed, than of the riches of the persons that consume the same. For what reason is there, that he which laboureth much, and sparing the fruits of his labour, consumeth little, should be more charged, then he that living idly, getteth little, and spendeth all he gets; seeing the one hath no more protection from the Common-wealth then the other? But when the Impositions are layd upon those things which men consume, every man payeth Equally for what he useth: Nor is the Common-wealth defrauded, by the luxurious waste of private men." — *Leviathan, or the Matter, Forme, and Power of a Common-wealth Ecclesiasticall and Civill*. By Thomas Hobbes of Malmesbury, London, 1651, chap. 30, part 2, p. 181 (reprint of 1881, p. 270). For a fuller statement of the benefit theory of taxation on which this passage is based, see Seligman, *Progressive Taxation in Theory and Practice*, 1894, pp. 87, 88.

insensibly without Complaint.”¹ Another writer in speaking of the Dutch excise regards it as “certainly the most equal and indifferent tax in the world, and least prejudicial to any people.”² So familiar indeed did the system become that Culpeper was able to state: “It hath alwayes been a received Maxim, That our meer Consumption can scarce be too heavily excised.”³ And in another passage he remarks that: “Domestick Excise in a thriving State hath no fellow, it carries no Compost from the Soyl, and even the Labourer pays it cheerfully when work is quick.”⁴

The excise, however, did not exist long before the pamphleteers began to have more decided views as to its incidence. Thus began the differences of opinion, which we shall now proceed to explain.

1. *The Excise does not rest on the Poor Consumers*

The first economist to express any decided opinion on the incidence of the excise was the famous advocate of the Mercantilist theories, Thomas Mun. He discusses the tax systems

¹ *An Expedient for Regulating the Customes and Excise. Approved by divers well affected Marchants, and others of the City of London.* By Francis Cradock. Marchant. London, 1659, p. 1.

² *England's Interest Asserted in the Improvement of its Native Commodities; and more especially the Manufacture of Wool.* By a true Lover of his Majesty and Native Country. London, 1669, p. 33.

³ *A Discourse shewing the many Advantages which will accrue to this Kingdom by the abatement of USURY, together with the Absolute necessity of Reducing Interest of MONEY to the lowest rate it bears in other Countreys, That, at least, we may Trade with our Neighbours upon Equal Termes.* Humbly presented to the High Court of Parliament now Sitting. By Sir Tho. Culpeper, jun. Kt. London, 1668, p. 3. The title of the work explains why Culpeper follows up the passage in the text by the admonition: “Then tax Usury, there is no Consumption like it; Excise the Excise-man, for Usury is the grand Excise upon our Land and Trade.”

⁴ *Ibid.*, p. 2. Culpeper is opposed to any further taxation of land, and expresses himself vigorously as follows:—

“Can the Land bear it? Surely No, if it be not limited to the present distress, and sweetened with some Recompense: Alas! Land is at its last Gasp, and ready to give up the Ghost, without a powerful Cordial: Most Parishes can already present some Farms wholly deserted, Neither Tenant being willing to hire, nor Owner able to stock them; Many stocked but two halves, most to loss: Be-

of Italy and Holland, and finds their essence to consist in "a custom on all new wares transported, customs upon every alienation or sale of live Cattel, Lands, Houses, and the portions or marriage money of women, license money upon all Victualling houses and Innkeepers, head money, Custom upon all the Corn, Wine, Oyl, Salt and the like, which grow and are consumed in their own dominions." Now all these seem to be "a rabble of oppression to make the people poor and miserable."¹ But Mun declares this to be a mistake. For in proportion as the necessities of life increase in price, the rate of wages must rise also. In the long run, therefore, the taxes on the poor will be shifted to the employers, and through them to the rich consumers of manufactured articles.² This is a good thing, because the rich will thus be "forced to abate their sinful excess and idle retainers."³ Mun's idea, it is plain, is that taxes on consumption are to be commended because they will be shifted to the employing producer; or, at all events, that they must not be regarded as falling on the consumption of the mass of the community.

Other writers furthered the doctrine that the excise did not rest on the mass of consumers by advocating the wider theory that taxes in general are really no burden. Thus, Waterhouse maintained that "money raised upon the poorer sort, returns to them again" in the shape of increased em-

sides, Land is like the heart, from which all the other Members must receive their Life and Vigour; Great reason therefore have we to cherish our Land, unless we will reduce our selves to the state of a meer Colony; which would manifestly end in our Desolation and Conquest."

¹ *England's Treasure by Forraign Trade, or, the Ballance of our Forraign Trade is the Rule of our Treasure.* By Thomas Mun. 1664, chap. xvi.: "How the revenues and incomes of princes may justly be raised," pp. 151, 152.

² "Neither are these heavy Contributions so hurtfull to the happiness of the people, as they are commonly esteemed: for as the food and rayment of the poor is made dear by Excise, so doth the price of their labour rise in proportion; whereby the burden (if any be) is still upon the rich, who are either idle, or at least work not in this kind, yet have they the use and are the great consumers of the poors labour."—*Ibid.*, p. 154 (p. 89 of the reprint of 1895 in Ashley's *Series of Economic Classics*).

³ *Ibid.*, p. 155.

ployment or higher wages, and that a tax must be looked upon as a loan, the proceeds of which soon come back to the taxpayers.¹ Another writer laid down the proposition that "Impositions upon a People make them thrive,"² and that "Taxes are no Charge either to the Kingdom in general, or to particular Persons; but on the contrary a Gain to all."³ His chief arguments to prove this assertion are, first, that since taxes are employed on court or for war they make money circulate, and, secondly, that "the poor are employed by Taxes, and are by that means taken off from being a Charge to the Kingdom."⁴ The author goes even farther than Waterhouse; for while the latter contented himself with calling taxes a species of loan, the former maintains that they ought properly to be regarded as the poor man's bank, which supports him in distress.⁵ Of all taxes, none appears to him so good as the excise, "which indeed seems of all Taxes the most equal: for that no man by it can be said to be oppressed,

¹ "What money the people bestow upon his Majesty in Leavies and assessments, his Majesty returns to his people in wages, pay, exchange and Merchandize, what he receives for his care, he payeth them for their Labour; what is paid to his *Exchequer* is returned to their Markets: there is a circle in the veine of Gold and Silver as in that of blood. . . . This money is not *lost*, but *lent*. . . . What the Gentry take from you with one hand, they give you with another; what their power ruling over you calls for in contribution, their goodness in employing you bestows upon you in wages." — *One Tale is good, until another is told, or, Some sober Reflections upon the Act for Chimney-Money. Drawn up for the Use of some Neighbors, and thought usefull to be communicated to the good people of this NATION.* By William Waterhouse, Esq., London, 1662, pp. 29, 30.

² *Taxes no Charge: in a Letter from a Gentleman, to a Person of Qualitye Shewing the Nature, Use, and Benefit of Taxes in this Kingdom; and compared with the Impositions of Foreign States.* London, 1690, p. 5.

³ *Ibid.*, p. 9.

⁴ *Ibid.*, p. 13. Additional reasons are that "the worst members in the Commonwealth (viz.) the Extravagant and Debauch'd" really pay the taxes, and that so far as taxes consist of customs duties, they "Keep out a Destructive Trade."

⁵ "'Tis a vulgar error to believe that Taxes, even to the meanest Man is a Charge, for that his Mite is with increase return'd by the expence of that which would never have seen day, but by the force of a Law; so that publick Taxes, expended in our own Country, may be accounted the poor and the Mechanick's bank, by which they are employed, and maintained." — *Ibid.*, pp. 17, 18.

he being his own Assessor, and pays but what he pleases, according to his Expence.”¹

Another anonymous pamphleteer of the same period agrees that “Excises are the most equal and less grievous Tax of all others,” and believes that a moderate tax will not be felt to such an extent as to hinder consumption at all.² “Who would ever use the less Sugar, if one peny Excise were paid out of twelve peniworth? Who would use the fewer Ribbons, for 2d. Excise upon every 12d.? Who would play the less at Cards or Dice, if 3d. were paid out of 12d.? What Lady would ever forbear to wear Pearls or Diamonds, or to buy Fans and Looking-Glasses, if 4d. were laid upon every 12d.?” Our author’s confidence in the harmlessness of a tax amounting to one-third of the value of a commodity would, perhaps, not be shared by many of the present day.

These views of Mun and his successors as to the virtual immunity of the mass of consumers from the weight of taxation did not, however, make much headway. During the following decades the opinion, to be discussed in the next section, that the excise was a real burden on the poorer consumers, gradually gained ground. But toward the middle of the eighteenth century, isolated writers reverted to the theory of Mun. Of these, none is more remarkable than Fauquier. He gives a most lucid and vigorous argument, designed to show that a tax on the workingman, whether a direct tax on wages or an excise on the necessities of life, will inevitably be shifted from his shoulders. Fauquier puts his general principle as follows: “The Poor do not, never have, nor ever possibly can, pay any Tax whatever. A man that has noth-

¹ *Taxes no Charge*, p. 25. Although the author opposes the benevolences, monopolies, alterations of money and taxes on polls, offices and travellers, he suggests a supplement to the general excise through taxes on Jews, playhouses and “the Vermin of the Nation, lewd Persons of both Sexes.” It is no wonder that he confesses in another place: “thus I have huddl’d together a mixt Discourse.” — *Ibid.*, p. 19.

² *A familiar Discourse between George, a true-hearted English Gentleman, and Hans, a Dutch Merchant: Concerning the present Affairs of England.* London, 1672, pp. 37, 38.

ing can pay nothing.”¹ He proceeds on the assumption that wages are always at the bare minimum of subsistence. If the laborer, therefore, can no longer live on his usual income, whether this condition be due to an increase in the price of necessities or to a forcible diminution of his wages through a tax, his nominal wages must rise in proportion.² In fact, Fauquier believes that in many cases his wages will rise more than in proportion to the tax. But this he does not attempt to prove. He does, indeed, try to show that when a tax is imposed on the producer or the seller of commodities, a sum over and above the tax will be shifted to the purchaser.³ But even if this conclusion were valid as to profits, the reasoning would not be applicable to wages. However this may be, Fauquier is quite positive that taxes rest only on the rich consumer, “that is, the Man of Fortune who lives on his Income.” And this is true, “even in those Taxes which are said mostly to affect the Poor, and which they seem, at first Sight, to pay out of their own Pockets.”⁴

Fauquier, indeed, differed from Mun in his practical conclusions. For while Mun advocated the general excise, Fauquier opposed it on the ground that the same result—that

¹ *An Essay on Ways and Means for raising Money for the Support of the Present War, without increasing the Public Debts.* By F. F. (Fauquier), London, 1756, p. 17. “This is universally true in all Countries,” he adds, “at all Times, and equally so, whether Provisions are dear or cheap. I have heard, that in India a man can live for one Penny a Day; this then will be nearly the Price of Labour in that Country.”

² “If by Taxes, or Dearth, or any other Cause, the common Necessaries of Life become so dear, that a Labourer cannot live at the usual Wages; the Price of Labour must, and in Fact actually does, rise in Proportion thereto at least, generally much more.”—*Ibid.*, p. 18. “If Taxes are laid on Labour meerly, or on such Articles as the meanest Labourer must want and use, he will still live, and his Wages must be raised.”—*Ibid.*, p. 20.

³ “If [taxes are laid] on the Manufacturers, or Venders of Goods, they will raise the Prices of the Commodities they respectively deal in, sufficient not only to pay the Tax, but to make them full amends for the Money they disburse for the Payment of it, and then always make a third Addition to bring the Price to a round or even Sum. So that the whole Tax, and much more, is ultimately paid by the Consumer.”—*Ibid.*, pp. 19, 20.

⁴ *Ibid.*, p. 20.

of taxing expense — might be more conveniently attained in another way.¹ The point of interest to us here, however, is that both writers agreed in the belief that an excise would not rest on the poor consumer, but would be shifted to the employer, and that if we can speak of an excise resting at all on the consumer, it is the rich consumer that is meant. This doctrine was later accepted by Sir James Steuart² and became a part of the classical doctrine, as elaborated by Adam Smith and Ricardo.

2. The Excise rests on Consumers in General

By far a majority of the writers believed that the excise rested on the mass of consumers in general, irrespective of the fact whether they were poor or rich. This broad theory was ushered in by the famous economist and statistician, Sir William Petty. Petty also has the distinction of being the first English writer to devote an entire work to the subject of taxation.³ It will repay us, therefore, to dwell somewhat more fully on the general theory of incidence that is found in his book.

Petty first discusses the procuring of revenue from land, which he says can be done in two ways, — either by “setting apart a proportion of the whole Territory for Publick Uses,” or by “an excision of the land by way of assessment or land tax.” Such a land tax, where “an aliquot part of every Landlords Rent were excinded or retrenched,” is good in a new country, where a certain quit-rent is reserved beforehand, because it will be borne partly by the landlord, but also partly by the consumers. For “it is not onely the Landlord pays, but every man who eats but an Egg, or an Onion of the growth of his Lands; or who uses the help of any Artisan, which feedeth on the same.”⁴ In old countries, like England, he continues, where rents are fixed for a long time, such

¹ See below, p. 62.

² See below, p. 88.

³ *A Treatise of Taxes and Contributions*. [By William Petty.] London, 1667.

⁴ *Ibid.*, p. 20.

a tax would be unjust, because it would benefit only the landlords who renew their rents. These gain doubly, "one way by the raising of their Revenues, and the other by enhancing the prices of provisions upon them." For the tax "doth ultimately light upon the consumptioners," or, as he again puts it, a "Land-tax resolves into an irregular Excize upon Consumptions, that those bear it most, who least complain."¹

Petty also discusses the house tax or "an Excisium out of the Rent of Houseing." He deems the influence of this much more uncertain than that of land, "for an House is of a double nature, viz. : one, wherein it is a way and means of expence; the other, as 'tis an Instrument and Tool of gain. . . . Now the way of a Land-tax rates housing, as of the latter nature, but the Excise as of the former."² From which it may be inferred that Petty thinks a house tax will be shifted to the consumer or occupier, and will be shifted further on to consumers when the occupier himself is a producer.

In regard to "customs," both "outwards" and "inwards," Petty assumes that they will be shifted to the consumers, and concerns himself primarily with stating the principles on which they should be levied. His chief objection to customs duties is that they are frequently imposed on articles which serve as the raw materials for further production, or, as he puts it, "that Duties are laid upon things not yet ripe for use, upon Commodities in *feri*, and but in the way of their full improvements."³ Poll-money, which he opposes because of its inequality,⁴ he thinks cannot be shifted. He concludes that a general excise is the best of all taxes, and assumes that, while it will be transferred to the general consumer, it cannot be shifted any further. In this respect it is superior

¹ *A Treatise of Taxes and Contributions*, p. 21.

² *Ibid.*, p. 21.

³ *Ibid.*, p. 36. "This," he later adds, "is the reason why I think the Leavy we commonly call Customs to be unseasonable and preposterous, the same being a payment before consumption." — *Ibid.*, p. 70.

⁴ Petty grows very indignant over the English system: "so as by this Confusion, Arbitrariness, Irregularities, and hotch pot of Qualifications, no estimate could be made of the fitness of this Plaister to the Sore." — *Ibid.*, p. 41.

to the land and house taxes; for these, as we have seen, are only partially shifted to the consumer.

Petty's views on the general property tax are interesting as showing in this, the first book on the theory of taxation, a recognition of the defects of the system which was gradually coming to its close in England. After recounting the many defects and abuses connected with the system,¹ he closes with the statement: "I have not patience to speak more against it: daring rather conclude without more ado, in the words of our Comick to be naught, yea exceeding naught, very abominable, and not good." In another work, however, Petty seems still to pin some faith on the chance of reaching personal property.²

This is not the place to discuss Petty's many reasons for favoring expenditure as the basis of taxation.³ It will suffice for our purposes to state that, starting out from the principle that a tax on expense is the ideal form of taxation, Petty advocates the general excise as reaching this result most surely and most speedily. He discusses the plan of levying a single tax on some one object of expenditure, termed by him the "Accumulative Excise" or tax "upon some one single particular," which may be deemed "to be nearest the common standard of all Expense." But he prefers the scheme of levying a tax upon "every particular Necessary, just when it is ripe for Consumption."⁴ Still, as he himself sees that

¹ "There have been in our times, ways of levying an *aliquot* part of mens Estates, as a Fifth, and Twentieth, *viz.* of their Estates real and personal, yea, of their Offices, Faculties, and imaginary Estates also, in and about which way may be so much fraud, collusion, oppression, and trouble, some purposely getting themselves taxed to gain more trust: Others bribing to be taxed low, and it being impossible to check or examine, or trace these Collections by the print of any footsteps that leave (such as the Hearths of Chimney are)." — *A Treatise of Taxes*, pp. 61, 62.

² He hazards the conjecture that "assessments upon personal estates, if given in as elsewhere upon oath, would bring that branch which of itself is most dark to a sufficient clearness." — *Verbum Sapienti; or . . . the Method of raising Taxes in the most equal manner*, p. 17 (Appended to his *Political Anatomy of Ireland*, edition of 1691). Cf. Seligman, *Essays in Taxation*, p. 48.

³ They may be found in chap. xv. of *A Treatise of Taxes*.

⁴ This he terms "the very perfect Idea of making a Leavy upon Consumptions." — *Ibid.*, p. 69.

this may be "too laborious," Petty suggests as an alternative scheme that "we ought to enumerate a Catalogue of Commodities, such whereof accompts may be most easily taken," but "being withall such, as are to be as near Consumption as possible."

The views of Petty gradually diffused themselves throughout the community, keeping pace with the ever-widening use of indirect taxes on consumption. Many of the writers of the close of the seventeenth century now became ardent advocates of the general excise. The author of an interesting pamphlet, after giving a definition of excise,¹ proceeds to explain that, although the "makers or Factors" of commodities advance the money, they really shift the tax to the public without the latter being aware of it. This constitutes, in his eyes, the great advantage of the excise; for if the tax were imposed directly on the consumers, it would give rise to great complaint.² The author is very careful, however, to emphasize the necessity of taxing only those articles which are necessities of life and in universal use. In this way, he asserts, not only will the revenue be large, but the principle of universality of taxation will be carried out.³

The same belief in the excise, on the score of its reaching

¹ "When we speak of an Excise, we mean . . . the whole Duties of any kind whatsoever, that are charged upon any Goods or Commodities expended within the Kingdom." — *A Discourse (by way of Essay) humbly offer'd to the Consideration of the Honourable House of Commons, towards the Raising Moneys by an Excise, demonstrating the Conveniency of Raising Moneys that Way.* By W. C., Esq. London, 1695/6, p. 3.

² "The Money being deposited by the *Makers* or *Factors* who take it again, in the Price of them, at the Sale, the People pay it insensibly in the Value of the Goods they buy; for we must not think that the *Merchants* or *Traders* pay all the Money of the *Customs* and *Excise*; they are but the Depositors of it, and the People paying it in a way so secret and insensible, it meeteth not with any Contradiction from them, as it would do, were they themselves to lay down the present money." — *Ibid.*, p. 4.

³ This plan is "that whatsoever Commodities be made Excisable, are to be of a large, universal and necessary Expence: Of a large Expence, otherwise, there will be a great Noise to little Purpose. If it be of an Universal Expence, then every Man will bear his Lot. If it be of Necessary Expence, there will be no avoiding the Use of that Commodity." — *Ibid.*, p. 8.

the entire mass of the consumers, is found in the work of Burnaby, who advocated an extension of some of the internal duties on commodities. His particular scheme was the imposition of a tax on malt, which in his opinion "will be less felt than usually Taxes are, by reason every Person will pay Proportionable in the Price of Malt."¹ He lays down his general principle as follows: "The more universal any Tax is, it is to be supposed (unless in some Particular Cases) to be the more equal." Then follows the minor premise: "I presume, no Person will deny that such a Tax will prove so universal, that not any Person will escape paying his Proportion according to his consumption." From all of which it is easy to draw the conclusion that "no Person can complain; who Consumes little, will have but little to pay."

Another writer, commenting upon some of Petty's statements, puts very forcibly the case for the general excise, of which he says, "I must allow, 'tis, singly considered, perhaps the most equal, and Innocent of any particular way of Taxing, commonly proposed or discoursed of."² Not only is every man, he thinks, his own assessor, but the tax is paid by the final consumer almost unconsciously; it conduces to thrift, and it spares the land, which is the real source of public wealth.³ Nevertheless he is alive to some of its shortcom-

¹ *Two Proposals, Humbly Offer'd to the Honourable House of Commons, now assembled in Parliament. I. That a Duty be laid on Malt, in the stead of the present Duty on Beer and Ale. II. That a Duty be laid on Malt, and the present Duty on Beer and Ale be continued.* By A. Burnaby, of the Middle-Temple, Gent. London, 1696, p. 2. Cf. p. 24. Much the same idea is contained in another pamphlet by Burnaby, entitled: *An Essay upon the excising of Malt, as also the present Case of Tallies considered.* London, 1696.

² "Excepting," he adds, like all the writers of the time, "Imposts on some Forreign hurtful Superfluities, for the due regulating of Trade."—*A Letter from a Gentleman in the Country to his Friend in the City: touching Sir William Petty's Posthumous Treatise; entituled Verbum Sapienti, etc.* London, 1691, p. 14. This tract has sometimes been ascribed, but probably without good reason, to Sir Thomas Culpeper.

³ "It hath a notable Air and Aspect of Freedom, every one being indeed his own Assessor: It rises almost insensibly, bringing the Multitude (who are more apt to murmur at integral Taxes), without much Grudging, to pay their Quota's in this. It affects not immediately the Fund of Land, as our sole Land-Taxes mischievously

ings,¹ and queries whether the object of relieving the land from excessive taxation may not perhaps be more conveniently attained in another way.²

A considerable number of other writers, who believed that the excise would be shifted to the mass of consumers, now began to express their doubts as to the beneficence of the tax in general. Several went no further than to criticise the rate of the tax, admitting the validity of the principle of the excise, but desiring necessities to be taxed at a lower rate. Thus Sheridan contends that "the Excise, if equally imposed, were the best and easiest of all taxes,"³ and advances the usual arguments in its favor.⁴ But in discussing some of the special excises, such as the beer-tax, he maintains that they should have been levied on the richer classes, rather than on the workingman.⁵ It is perhaps his uncertainty as to the real benefits of the excise that leads him to propose as a possible, but novel, substitute a tax on bache-

do: And so powerfully doth it recommend, indeed preach Frugality, that, to say the truth, It in a manner condemns all Unthrifths, as meer Ideots or Lunaticks." — *Ibid.*, p. 14.

¹ "Excise, you know, hath obtained a current Repute of perfect Equality: Now I by no means admit of that; not only Niggards, but all those whose Condition obliges them not to live Honourably upon their Demeanors, at pleasure avoiding it."

² See below, p. 68.

³ *A Discourse on the Rise and Power of Parliaments, of Laws, of Courts of Judicature, of Liberty, Property, and Religion, of Taxes, Trade and of the Interest of England in Reference to France. In a Letter from a Gentleman in the Country to a Member of Parliament.* [By Thomas Sheridan.] London, 1677, chap. xiii, "of Taxes." Reprinted as a separate volume in *Some Revelations in Irish History; or, Old Elements of Creed and Class Conciliation in Ireland.* Edited by Saxe Bannister. London, 1870.

⁴ "It ought to be laid upon all things ready to be consumed. This puts it into the power of every man to pay more or less, as he resolves to live loosely or thriftily; by this course no man pays but according to his enjoyment or actual riches, of which none can be said to have more than what he spends; true riches consisting only in the use." — *Ibid.*, p. 172.

⁵ "To speak the truth in good conscience, this branch ought to have been imposed on the nobles and estated-men rather than on the artificer and labourers, who were very slenderly concerned in the grounds of it." — *Ibid.*, p. 173.

lors.¹ In much the same spirit the author of the celebrated *Britannia Languens*² advocates an excise primarily on the superfluities of the rich, and maintains that if excises are levied on ordinary necessities at all they must be very low ones.³ A little later we find the view that high excises are clearly pernicious, and that revenue should be derived rather from "small excises" on commodities which had hitherto escaped taxation.⁴ Finally, the growing belief that high excises would ultimately affect the consumer led some writers to advocate particular kinds of excises for the precise purpose of diminishing extravagant consumption. A good example of this is the proposal to tax bricks in order to check the growth of London at the expense of the rural districts.⁵

¹ "I have thought of a sort of tax which I believe is perfectly new to all the world. . . . It is a tax upon celibate, or upon unmarried people, *viz.* that the eldest sons of gentlemen, and other degrees of nobility upwards, and all other persons not married by the times limited as aforesaid [from twenty to twenty-five years of age], shall pay per annum a-piece these following rates, etc., etc.; and all married men not cohabiting with their wives to pay quadruple." — *A Discourse on the Rise and Power of Parliaments*, pp. 177, 179.

² *Britannia Languens, or a Discourse of Trade: shewing the Grounds and Reasons of the Increase and Decay of Land-Rents, National Wealth and Strength*, etc. London, 1680.

³ "But since I have now, and before mentioned Excises, and have observed some men of Parts, almost to startle at the naming of a new Excise, I shall thus far explain and vindicate myself, and the proposal: First, I shall agree that such Excises as affect and over-burthen the beneficial parts of Trade, are of pernicious Consequence. Secondly, that an Universality of Excise is both inconvenient and unnecessary; but that there may be Excises Imposed on many Superfluities, and Excesses, in Meats, Drinks, or Equipages, or upon some imported Goods *Consumed at home*, which would be no prejudice to any kind of Trade; being no clog upon our Exports, or Re-exports; or perhaps, a very small Excise on ordinary Meats, Drinks, and Apparel, might be supportable." — *Ibid.*, p. 294.

⁴ "High Customs and Excises are great Obstructions to Trade. . . . This Grievance might be redressed by moderating the excessive Duties, and making the Excises more universal." The author therefore proposes "a new Fund by small Excises on Things which have not been yet Taxed." — *A Proposal for the Payment of the Publick Debts, and an Account of some Things mentioned in Parliament on that Occasion*. London, 1714, p. 20.

⁵ "The Duty on Bricks and Tiles may give a seasonable Check to the wanton and extravagant Humour of Building, particularly about this Metropolis, whereby the Head is likely to grow too big for the Body." — *Animadversions and Obser-*

The authors hitherto discussed, holding to the doctrine that a tax on the producer or dealer is shifted to the consumer, all agree that excises are desirable, although they differ somewhat in the intensity of their desire for such a method of revenue. But we now meet with a class of writers who hold the same theory of incidence, while at the same time they strenuously object to all excises, precisely because they fall on the consumers. They accept the doctrine that excises are shifted to the consumer, but they do not believe that the consumer ought to be saddled with the entire load. We meet with this objection to excises very shortly after the inauguration of the system.¹

The growing opposition is well reflected in a Scotch pamphlet written at the beginning of the eighteenth century, in which a melancholy picture of the future of the kingdom is traced, and the gradual pauperization of the whole community is predicted.² But it was especially at the time of Walpole's excise scheme that this opinion as to the pernicious

vations upon a Treatise entituled Some Calculations and Remarks relating to the present State of the publick Debts and Funds . . . by Archibald Hutcheson . . . to which is added a New Proposition to raise Money for the Use of the Publick. Humbly submitted to the Consideration of both Houses of Parliament, etc. London, 1718, p. 47. The author joins to this recommendation, a proposal for a tax on plate.

¹ One of these early writers expresses himself very vehemently, as follows: "That the Excise of Ale, Beer, Perry, and Syder, and the charges, affliction, and troubles, which it brings upon the people, which before our times of misery, would have brought death and ruine any private contriver; and was at the first created by Oliver and his Impes to maintain a cursed Rebellion, and set up a destroying and detestable Anarchy, may be abolished, and taken away, and the Nation restored to the freedom and quiet which they formerly enjoyed under this our ancient and excellently composed Monarchy." — *Restauranda: or the Necessity of Publick Repairs, by setting of a certain and Royal yearly Revenue for the King*. [By Fabian Philips.] London, 1662, p. 95. A still earlier fulmination was: *A Declaration against the illegal, detestable, oft condemned new Tax and Extortion of Excise in general, and for Hops (a native uncertain commodity) in particular*. By William Prynn, Esq. London, 1654.

² "Our Merchants are the first Advancers of the Taxes that are upon Trade, but they are refounded with double Interest by the Noblemen and Gentlemen, who for the most part consume all the valuable Goods Imported.

"Our Peers and Barons, may easily judge, how far they will be able to make

cious effects of the excise was expressed with great energy.¹ Some of the writers, however, who were then quite willing to abandon consumption as the general norm of taxation, based their opposition to excises primarily on the ground that the tax falls with greater severity on the poorer consumer, and that it is to be reprehended for this reason.

One of the earliest authors to show this defect in the excise is Cary. He starts out with the general proposition that the tax system must be so contrived "that the Poor bear little or none of the Burthen, their Province being more properly to labour and fight than pay."² Not only does a man who works for his income part with it with reluctance, says he, but the revenue accruing to the government from these small

any Consumpt of these Goods, or pay what they get, when there is not only Taxes on their Land, but on the Product of their Land, viz. their Malt, Beer and Ale.

"Our Burgesses may soon consider, that when the Peers and Barons have no Money, their Trade must decay.

"Our Mechanicks will have no difficulty to believe, that if there be no Trade, and no circulation of Money, their best Trade will be a Plantation Trade.

"And in the last place, when our Commons buy such dear Ale, pay so much Tax on Salt, have nothing or a very small Price for the Fruit of their Labour; they will never be in a Condition to pay their Farms; so in place of Riches, Poverty will soon circulate among us."—*A Short View of our present Trade and Taxes compared with what these Taxes may amount to after the Union. With some Reasons why (if we enter in an Union,) our Trade should be under our own Regulations.* 1706, pp. 5, 6. The work is sometimes ascribed to Daniel De Foe.

¹ Cf. the following passage: "Excises first got a footing amongst us in the Civil Wars, which was a time of universal Confusion; and they were then so odious that each party branded the other with being the Authors thereof; but before that, they were so much dreaded, that a Member of Parliament was very near being sent to the Tower for only mentioning their name in the House, tho' with no evil design: What then would they have done to the Man, who should have proposed multiplying them, when the Nation groaned under the Burthen of so many, as we do already."—*A Word to the Freeholders and Burgesses of Great Britain, being Seasonable and serious Remarks upon the inconsistent Conduct of certain Boroughs, in sending Instructions to their Representatives to oppose the Excise Bill, and yet re-electing them after their being rewarded with Places for voting for the same.* London, 1733, p. 31.

² *An Essay on the State of England in relation to its Trade, its Poor and its Taxes, for carrying on the present War against France.* By John Cary, Merchant in Bristoll. Bristoll, 1695, p. 173.

payments will after all be insignificant.¹ The vital objection to the excise, however, is its inequality; for although the rich man consumes more than the poor man, the tax is paid in the one case out of the surplus over and above all needful expenditure, but in the other case out of a fund which barely suffices for the necessities of life.²

This view, which closely approaches the one held by modern democracies, was occasionally emphasized in the following decades. One vigorous writer, early in the eighteenth century, objects to "those cruel and unequal Taxes, which pinch and afflict those People chiefly who are least able to support Taxes."³ He advances what he calls a "true, tho' perhaps not a regularly determin'd Observation"; namely, "when Land is Tax'd, the Rich pay more than the Poor; but when the Product of Land is tax'd, the Poor pay more than the Rich." He proceeds to show that "the Rich pay for their Land because they have it; the Poor pay for their daily Necessaries, because they have them not."⁴ Owing to his belief that taxes on commodities are relatively more burdensome to the poor, he favors the land tax,⁵ together with a tax on funds.⁶

¹ "He that gets his Money by the Sweat of his Brow parts not from it without much Remorse and Discontent, and when all is done, 'tis but a little they pay, therefore Taxes that light heavy on them (such as Chimney-Money, and oftentimes a Poll) tend rather to unhinge than assist the Government, by disgusting such a number of robust and hardy men as carry a great personal Ballance in the Kingdom."—*Ibid.*, p. 174.

² "A general Excise cannot do well, for besides the great Charge and Oppression of Officers, it shews no Respect to the Poor, but they pay more than the Wealthiest of their Neighbours suitable to what they have; for though a rich Man spends more in excisable things than a poor Man doth, yet it is not his All, whereas the other's Poverty gives him leave to lay up nothing, but 'tis as much as he can do to provide Necessaries for his Family, out of all which he pays his Proportion."—*Ibid.*, p. 174.

³ *Fair Payment no Spunge: or, Some Considerations on the Unreasonableness of Refusing to Receive back Money lent on Publick Securities. And the Necessity of Setting the Nation Free from the Insupportable Burthen of Debt and Taxes.* London, 1717. Chap. ix, "Of Equality of Taxes," p. 60.

⁴ *Ibid.*, p. 61.

⁵ *Ibid.*, p. 67.

⁶ *Ibid.*, chap. x, "Of Inequalities in Taxings," p. 71. See below, p. 69.

This view as to the incidence of the excise was, however, in some danger of being neglected, when, toward the middle of the eighteenth century, it was again put forward by two writers with such force that it left its indelible imprint on general thought. One of these authors goes so far as to break entirely with the old theory of the basis of taxation, and to lay down the principle that taxes should be levied according to property and not according to consumption. The excise, says he, sins against this cardinal rule, and is therefore convicted of inequality.¹ But even regarded as a tax on property—that is, on commodities—the excise is thoroughly unequal; for not only the tax, but a great deal over and above the tax, will be shifted to the consumer, and will hit the poor man on his necessities.² Our author is, however, so far carried away by his ardor to show the evils of the excise as to intimate that wages must rise with the increased price of necessities, and that therefore the whole community will suffer in the end.³ Were it not that he puts his emphasis on the first point—the burden on the poor,—rather than on the second—the burden on the general community—he ought rather to be included with writers like Mun and Fauquier.⁴

¹ "Excises, as they are of all Impositions the most injurious to Liberty, so they are the most unequal in their Nature, and fall the most heavily on Property. . . . They are the most unequal, because Taxes should be measur'd by Property. . . . But Excises measure by the Quantity of a Commodity consum'd: Whence the Contribution of a poor Man with a large Family, may exceed Those of a rich Batchelor of a hundred Times his Fortune."—*An Appeal to the Public, in relation to the Tobacco * * * and a Revival of the old Project, to establish a General Excise*. London, 1751, p. 51.

² "They fall most heavily on Property, more especially when impos'd on Necessaries, or on Commodities render'd by Habit necessary, because they accumulate as they go; because he that issues the Tax first, will be paid for the disbursement and also for the extraordinary Difficulties, Hardships, and Visitations brought upon him by them."—*Ibid.*, p. 52.

³ "Because the Price of Labour rises with the Price of the Commodities consum'd by the Labourer: and because the Dearness of Labour affects the whole Circle of our Commerce, both Domestic and Foreign. . . . This is sufficient to shew, that tho' the Trader is the first Person pinch'd on these Occasions, the Evil is progressive, and at last both fastens and preys on the whole Community."—*Ibid.*, pp. 52, 53.

⁴ See above, pp. 14 to 18.

The charge of inconsistency can, however, not be brought against Sir John Nickolls, the other writer to show the inequality of general taxes on consumption. Nickolls firmly held to the opinion that when taxes reached the consumers they stayed there.¹ Taxes on consumption, in his opinion, are thoroughly unjust, because they are out of all proportion to the relative abilities of the taxpayers; for abilities are measured by property and not by consumption.²

The opposition to the excise was also strengthened by those who not only pointed out that high taxes would cause serious damage to the consumer by compelling him to diminish his consumption, but also showed that this would involve a serious loss of revenue to the government. The point that was subsequently so well put by Dean Swift, that in the arithmetic of the customs two and two do not always make four, was already emphasized during the excise controversy, and was declared equally applicable to internal duties.³

¹ *Remarks on the Advantages and Disadvantages of France and of Great-Britain with Respect to Commerce, and to the other Means of Increasing the Wealth and Power of a State. Being a (pretended) Translation from the English, written by Sir John Nickolls and printed at Leyden 1754. Translated out of the French Original.* London, 1754.

² "That these taxes incur the objection of being unequal, and unjust, in that, for the portion of things absolutely necessary to life, the poor and the rich pay the same sum: insomuch that whereas the people being supposed divided into two parts pretty near equal, of which the one has only its industry to live upon, the other possesses riches, enjoys, and pays the labor of the other: these two halves, so different in their abilities, share nevertheless equally the weight of these taxes upon all the commodities, or rather necessities, of which the consumption admits of little or no abuse or luxury. The contribution is light, for the batchelors or single persons, in easy and idle circumstances: but is excessive for those usefull subjects, of whom the families are numerous, and the fortunes narrow." — *Ibid.*, p. 260. For his practical propositions, see below, p. 58.

³ "This is a Truth which will, I believe, be acknowledged by all Traders in general, it being universally known that the greater Duty any Commodity pays, the less of it ten-fold is consumed; consequently if the King has two Pence in the Pound for any Merchandize, that before paid but one Penny, not above a tenth Part of that Merchandize will be consumed, and consequently not above a tenth Part imported; so that upon the Ballance the Crown will be a Loser eight Parts in ten." — *The Norfolk Scheme: or a Letter to William Pulteney, Esq.; on the Present Posture of Affairs, particularly with Relation to the Scheme for altering*

The chief controversy as to the advisability of the excise turned, however, on the question of its influence on the laborer, and more especially of its effect on the cost of labor. Mun and his followers, it will be remembered, maintained that, so far as taxes on consumption were taxes on the necessities of life of the laborers, they would be shifted to the employers. Petty and his school, on the other hand, held that the excise on necessities of life would rest on the workman. But while these latter writers agreed on the theory of incidence, they drew different conclusions according to their belief in the efficacy of high or of low wages. Most of the writers of the close of the seventeenth and the first half of the eighteenth century imagined that taxes on the necessities of life would constitute a great stimulus toward an improvement in the condition of the laborer, in sobriety, carefulness and efficiency. A tax on labor would thus, they thought, be a real spur to industry and commerce, and a benefit to the community in general; for low wages mean low cost of production. When the necessities of life are taxed, runs the argument, not only will the laborer have to work harder and longer to maintain himself, — which will be a benefit to him — but, on the other hand, there will be a reduction in the labor-cost to the employer, which will be an advantage to the community. It was only very slowly that this belief in the efficacy of low wages was replaced by what we are to-day accustomed to call the theory of the economy of high wages. With it came a corresponding distrust of the policy of taxes on the necessities of life. But both the advocates and the opponents of the excise from this point of view based their practical conclusions on the same theory of incidence; namely, that a tax on necessities would rest on the laborer.¹

the Method of Collecting the Revenues, by converting the Customs into Excises, etc. London, 1733, p. 27.

¹ A mention of a few of the writers discussed in the following pages may be found in Schulze-Gävernitz, *Der Grossbetrieb*, 1892, pp. 2-10, recently translated by O. S. Hall, under the title of *The Cotton Trade in England and on the Continent*. London, 1895. But he does not treat them at all from the fiscal

The earliest trace of the doctrine that high wages are bad not only for the laborer but also for the community is found in a work of Thomas Manley. He points out that high wages are the principal cause of England's inability to compete with Holland in the production of manufactures. At the same time, he contends, high wages do the laborer no good, because not only do "the men have just as much the more to spend in tittle, and remain now poorer than when their wages was less," but "they work so much the fewer days by how much the more they exact in their wages."¹ Another writer shortly after expresses very much the same view as to the "mischievousness" of high wages,² and suggests that an endeavor be made "to reduce the wages of our Manufacturers to a more sober and less expensive way of living."

Neither Manley nor his anonymous follower proposed the specific expedient of a tax on wages. Manley contented himself with stating in general terms that the chief concern of England was to "subdue our wages";³ and the anonymous writer recommended a rather drastic but indirect method to reduce wages.⁴ But the theory, when once put forth, could point of view. Cf. also the few words in Brentano, *Das Verhältniss von Arbeitslohn und Arbeitszeit zur Arbeitsleistung*, 1875; 2d ed., 1893, p. 57.

¹ *Usury at Six per Cent. examined, and Found unjustly charged by Sir Tho. Culpeper and J. C. with many Crimes and Oppressions, whereof 'tis altogether innocent. Wherein is shewed the necessity of retrenching our Luxury and vain consumption of Forraign Commodities, imported by English Money: also the reducing the Wages of Servants, Labourers, and Workmen of all sorts, which raiseth the value of our Manufactures, 15 or 20 per Cent. dearer than our Neighbours do afford them, by reason of their cheap Wages, etc.* By Thomas Manley, Gent. London, 1669, p. 19.

² "Handicraft Tradesmens high wages, which they exact for their work, is greatly mischievous, not only to every man who hath occasion to use them . . . but it is destructive to Trade, and hinders the consumption of our Manufactures by Foreigners."—*The Grand Concern of England explained; in several Proposals offered to the Consideration of the Parliament.* By a Lover of his Country and Well-wisher to the Prosperity both of the King and Kingdoms. London, 1673, p. 54.

³ *Usury at Six per Cent.*, p. 22.

⁴ His plan is "to enjoyn all English men not to wear anything but what is of our own Growth and Manufacturies; which will encrease a Consumption at home, and set those at work who now live idle, and by giving them full work, would bring down their wages."—*The Grand Concern*, p. 55.

not fail to draw attention to its obvious corollary. The demand for the use of the power of taxation as an instrumentality of social reform and the regulation of labor soon made its appearance — for the first time, perhaps — in the work of John Houghton.¹

In the heading of the chapter devoted to this subject, Houghton lays down the principle "that this Kingdom will thrive more, and the Manufactors live better, and sell their Manufactures Cheaper when Provisions are Dear, than when Cheap."² His major premise is that "if there be of Food a Plenty, Laziness follows it."³ When the workmen get high wages, they stop work and spend their earnings in debauchery. The ordinary laborer in England earns enough in three or four days' labor to support him the entire week.⁴ If he had to pay more for his provisions, he would work harder and produce more.⁵ Thus dearness would, in the end, bring about industry and plenty. Houghton therefore proposes, in order to maintain this artificial dearness, not only an export bounty on corn, but an increase of the excise on beer, ale and spirits, as well as the imposition of an "Excise of a groat a pound on Wool."⁶ The effect of this will be, he thinks, that the "meaner sort of People will not

¹ *A Collection of Letters for the Improvement of Husbandry and Trade*. By John Houghton, Fellow of the Royal Society. London, 1681. The passages quoted are found in the second volume, London, 1683.

² *Ibid.*, p. 174.

³ *Ibid.*, p. 175.

⁴ "When the Frame-work Knitters, or Makers of Silk-Stockings had a great Price for their Work, they have been observed seldom to work on Munday and Tuesdays, but to spend most of that time at the Ale-House and Nine-Pins. . . . The Weavers, 'tis common with them to be drunk on Munday, to have their Heads ach on Tuesday, and their Tools out of order on Wednesday. As for the Shoemakers, they'l rather be hang'd than not remember St. Crispin on Munday; and it commonly holds as long as they have a penny of Money or pennyworth of Credit." — *Ibid.* p. 177. His account of "most other Professions that live by Labour" is equally delectable.

⁵ "If by the Dearness aforesaid the Manufactors cannot keep up their habitual Port by working three days in a Week, they will work four days, or find out Engines or new Contrivances equivalent." — *Ibid.*, p. 181.

⁶ *Ibid.*, p. 183.

be diverted from better Employments"; but that "this part of their Provision will be dearer to them, and will oblige them to more Industry, whereby they will procure more Manufacture to sell cheaper."¹

Petty himself, whose general theory on the incidence of taxation has already been explained,² in a subsequent treatise expressed views in substantial agreement with those of Houghton. He significantly heads the chapter in question "That some kind of Taxes and Publick Levies may rather increase than diminish the Wealth of the Kingdom."³ He maintains that when the price of food is low, laborers can scarcely be procured at all,⁴ and he accordingly recommends as extremely desirable a tax on the necessities of life.⁵

The belief that an increased cost of living would be an incentive to industry is found in many of the writers of this period. Not all, however, desire to secure this artificial dearth through the medium of taxation. Thus, Sir William Temple thought that the troubles of Ireland could easily be remedied by "an Increase of People in the Country to such a degree as may make things necessary to Life dear, and thereby force general industry from each Member of a Family (Women as well as Men)."⁶ In the same way another writer, soon after, sought to prove that "Labour is always dearest when Provisions are cheapest,"⁷ and that an increase

¹ *A Collection of Letters for the Improvement of Husbandry and Trade*, p. 184.

² Above, p. 18.

³ *Political Arithmetick*. By Sir William Petty. London, 1690, chap. ii.

⁴ "It is observed by Clothiers and others, who employ great numbers of poor people, that when Corn is extremely plentiful, that the Labour of the poor is proportionably dear: And scarce to be had at all (so licentious are they who labour only to eat, or rather to drink)." — *Ibid.*, p. 45.

⁵ Petty joins to this the further recommendation that in times of plenty the surplus food be sent to "publick Store-houses."

⁶ *An Essay upon the Advancement of Trade in Ireland*. By Sir William Temple. Published in his *Miscellanea*, ed. 1693, part i, p. 116.

⁷ *Some Thoughts on the Interest of Money in General, and particularly in the Publick Funds. With Reasons for fixing the same at a lower Rate, with Regard especially to the Landholders*. London, n.d. (published between 1728 and 1740). His argument is that "People in low Life, who work only for their daily Bread, if

in the price of necessities will not injure the laborer, or increase the cost to the producer.

The general doctrine that taxes really conduce to thrift was, however, made more or less popular in England toward the end of the seventeenth century, by appeals to the experience of England's great rival,—the Low Countries. Not only did authors, like Temple,¹ continually call attention to the Dutch, but ample testimony to the great benefits supposed to result from the excise was found in the works of the Dutch writers themselves, whose ideas were made accessible to the English public through translation. Thus, the author of the celebrated *Political Maxims*, who was always, but erroneously,² supposed in England to have been the renowned Dutch statesman, John De Witt, advocates the imposition of excises on the laborers, because "it is evident that all the said ways for raising of Money will excite the Commonalty to Ingenuity, Diligence and Frugality."³

This doctrine of the value of low wages continued far into the eighteenth century. One of its prominent advocates toward the middle of the century was the celebrated Josiah

they can get it by three Days Work in a Week, will many of them make Holiday the other three, or set their own Price on their Labour," p. 73.

¹ The following passage from Temple was much talked about: "The chief Fonds out of which this (Revenue) rises is the Excise and the Customs: The first is great and so general, that I have heard it observ'd at Amsterdam, that when in a Tavern, a certain Dish of Fish is eaten with the usual Sauce, above thirty several Excises are paid, for what is necessary to that small service."—*Observations upon the United Provinces of the Netherlands*, chap. vii; reprinted in *The Works of Sir William Temple, Bart.* London, 1720, i, pp. 70, 71.

² *The True Interest and Political Maxims of the Republic of Holland and West Friesland.* Written by John De Witt and other great Men in Holland. London, 1702. The original Dutch edition was published anonymously in 1662. The real author was Pieter De la Court. De Witt did indeed write one or two chapters, but not the ones in question. We now know precisely what he did write. Cf. Laspeyres, *Geschichte der volkswirtschaftlichen Anschauungen der Niederländer und ihrer Literatur zur Zeit der Republik.* 1863, pp. 18, 19.

³ *The True Interest*, p. 109. In *An Essay on Trade and Commerce*, mentioned below, p. 37, note 2, the maxim is quoted on p. 49 in a little different language, and ascribed to De Witt. The erroneous ascription is also followed in Arthur Young, *The Farmer's Letters*, p. 29, and in Schulze-Gävernitz, *Der Grossbetrieb*, p. 3.

Tucker. Tucker turns his attention to "the lower Class of People" and holds that if they "are subject to little or no Control, they will run into Vice: Vice is attended with Expence, which must be supported either by an high Price for their Labour, or by Methods still more destructive."¹ In England "the men are as bad as can be described: who become more vitious, more indigent and idle, in proportion to the advance of Wages and the Cheapness of Provisions."² Tucker then proceeds to discuss the plan of a "certain very ingenious Gentleman, and himself a great Manufacturer in the Clothing Way" to impose a special tax on the necessities of life. This gentleman had observed "that in exceeding dear Years when Corn and Provisions are at an extravagant Price, then the Work is best and cheapest done:—but that in cheap Years, the Manufacturers are idle, Wages high, and Work ill done." "Therefore," adds Tucker, "he infers, that the high Duties, Taxes and Excises upon the Necessaries of Life are so far from being a Disadvantage to Trade . . . that they are eventually the chief Support of it:—and ought to be higher still, in order to oblige the Poor either to Work or Starve."³

Tucker observes that "Some Things may certainly be said in favour of this Scheme." But on mature reflection he is, as "an humane and compassionate man," a little doubtful about it,⁴ and thinks that his alternative plans of encouraging immigration⁵ and of raising the pecuniary limit of the elective franchise⁶ may produce the same results and "keep

¹ *A Brief Essay on the Advantages and Disadvantages which respectively attend France and Great Britain, with Regard to Trade, etc.* By Josiah Tucker. 2d ed., London, 1750, p. 36. The third edition of 1753 is reprinted in Lord Overstone's *Select Collection of Scarce and Valuable Tracts on Commerce*, 1859.

² *Ibid.*, p. 37.

³ *Ibid.*, p. 54.

⁴ He even speaks of it as "a very singular scheme."

⁵ The advantage of his "Naturalization" scheme is supposed to be "that by this means, the Price of Labour is continually beat down, Combinations of Journeymen against their Masters are prevented, Industry is encouraged and an Emulation excited." — *Ibid.*, p. 42. Cf. p. 91.

⁶ As a consequence of raising the elective franchise to £200 for tradesmen,

down the Price of Labour and prevent any Combination." As a result of this "perhaps the morals of our Poor would be as unexceptionable and the Price of Labour as cheap as in any other trading country." Later, indeed, Tucker changed his opinions still further; for he not only became an advocate of a direct tax on luxuries,¹ but finally abandoned his whole contention as to the efficacy of low wages.²

The doctrine that wages do not rise with the price of provisions was also developed by several writers who objected to the restrictions on the exportation of wheat. They did not deny that prices would rise, but contended that high prices of food would mean more work rather than higher wages. Arthur Young, for example, not only states that "in no instance will you find that labour is high, because provisions are the same,"³ but he adds that "living must be rendered dear before that general industry, which can alone support a manufacturing people, will be rooted amongst them."⁴ "High taxes," he continues, "must have operated to render high rates of labour necessary . . . in those countries where manufactures make the greatest shoots."

The most complete development of the doctrine that excises are a benefit to the laborers is found in the anonymous

"the privilege of voting would become a laudable Inducement to every Artificer (not to get Drunk, or take a paltry Bribe, as at present is the case) but to be frugal and saving. . . . The Number also of the Poor would consequently be lessened: the Price of Labour reduced."—*A Brief Essay*, pp. 52, 53.

¹ See below, p. 58.

² See below, p. 45.

³ *The Expediency of a Free Exportation of Corn at this Time: with Some Observations on the Bounty*. By the author of the *Farmer's Letters to the People of England*. London, 2d ed., 1770, p. 21.

⁴ *Ibid.*, p. 28. The same ideas are expressed by Young in other works. So in *The Farmer's Letters to the People of England*, London, 1767, pp. 27–32, where he quotes approvingly the tract mentioned in the next note. So also in his *Political Arithmetic, containing Observations on the Present State of Great Britain and the Principles of her Policy in the Encouragement of Agriculture*, London, 1774, where he quotes Houghton's maxim that it is a good thing "to encourage the people to a high living." Young comments on this by saying: "The idea of encouraging the people to live high, is a very bold, but I believe a just one."—*Ibid.*, pp. 110, 111.

work of Temple, who wrote shortly before Adam Smith. A riot of the workingmen in London, due to a combination of high prices of food and a lack of work, took place in 1765. This led our author to publish a tract, in which he attempted to prove that high prices were beneficial to the laborers in that it stimulated their industry.¹ Five years later this tract was rewritten and published as a portly volume. In it he advances "the paradox that taxes tend to lower the price of labour," and states as a familiar truth that "when provisions are cheap, labour is always relatively dear." The three self-evident principles on which the whole work rests are summarized as follows: "First, that mankind, in general, are naturally inclined to ease and indolence, and that nothing but absolute necessity will enforce labour and industry. Secondly, that our poor, in general, work only for the bare necessities of life, or for the means of a low debauch; which, when obtained, they cease to labour till roused again by necessity. Thirdly, that it is best for themselves, as well as for society, that they should be constantly employed."²

Temple argues that as laborers are far more anxious to work when provisions are very dear, the augmented supply of labor at such times brings down the rate of wages. "A general industry is immediately created; workmen croud about the houses of master-manufacturers, begging for work, almost at any rate; and they work five or six days

¹ The title of this tract clearly explains its purpose: *Considerations on Taxes, as they are supposed to affect the Price of Labour in our Manufactures: also, some Reflections on the General Behaviour and Disposition of the Manufacturing Populace of this Kingdom; showing, by Arguments drawn from Experience, that nothing but Necessity will enforce Labour; and that no State ever did, or ever can make any considerable Figure in Trade, where the Necessaries of Life are at a low Price.* London, 1765, esp. pp. 29-31. Cunningham, *Growth of English Industry and Commerce in Modern Times*, p. 560, ascribes it to Temple. This William Temple was originally a clothier of Trowbridge, and must not be confounded with Sir William Temple, who entertained much the same views, but who wrote in the preceding century. See above, p. 33.

² *An Essay on Trade and Commerce: Containing Observations on Taxes, as they are supposed to affect the Price of Labour in our Manufactories: together with some interesting Reflections on the Importance of our Trade to America.* By the author of *Considerations on Taxes.* London, 1770.

in the week instead of three or four. Labour being a kind of commodity, the quantity then offered tends to the lowering its price; and would do so, unless art or violence intervened. Thus far the paradox is explained by experience; and thus far it is proved, that dearness of provisions tends to lower the price of labour in manufactories."¹ Temple then proceeds to prove the other side of the same proposition, that low prices of food lead to high wages and dear work. The experience of Holland, as usual, furnishes him with his strongest illustrations. He does not, indeed, go so far as to recommend any further increase of taxes on the laborer.² But he is at considerable pains to point out that the taxes thus far levied on the necessities of life, whether in the shape of excises or of impost duties, have exerted none but a good influence on the laborers in particular and on the community in general.³

While the fullest exposition of this doctrine is found in the book just mentioned, the strongest and most aphoristic expression of the idea is contained in another work of William Temple,⁴ with an extract from which our series of quotations may fitly close. Temple contends that "the only way to make the poor temperate and industrious, is to lay them under a necessity of labouring all the time they can spare from meals and sleep, in order to procure the common necessities of life."⁵ And after adverting to the experience of Holland,⁶

¹ *An Essay on Trade and Commerce*, p. 16.

² *Ibid.*, pp. 282-286.

³ "Of what infinite consequence then is it," he exclaims in another place, "that some method should be found out to enforce labour, and to procure habits of sobriety and industry among the manufacturing populace." — *Ibid.*, p. 31. Cf. also pp. 22 *et seq.* of the original tract of 1765.

⁴ *A Vindication of Commerce and the Arts, proving that they are the Source of the Greatness, Power, Riches and Populousness of a State.* By I. B., M.D. [William Temple]. London, 1758. The tract has been reprinted in Lord Overstone's *Select Collection of Scarce and Valuable Tracts on Commerce*. London, 1859.

⁵ Overstone's *Select Collection*, p. 534.

⁶ "Wages in Holland are low in proportion to the price of necessities, everything being excessively taxed; the people from hence are exceedingly industrious." — *Ibid.*, p. 532.

he concludes that the best way is "to raise a fund by a tax on necessities in a time of plenty."¹

In the face of the virtual unanimity of opinion of this considerable number of authors, it would seem difficult for the contrary view to make any converts. Nevertheless, although it was not at first a popular doctrine among economic writers, the theory that low wages are not necessarily a benefit to a country, and that taxes are not needed to reduce the cost of labor, gradually made headway in scientific and commercial circles.

Perhaps the earliest writer to deny the theory that low wages are good for a country was Josiah Child. In a controversy with Manley he takes exception to the statement that "it is the Dearness of Wages that spoils the English Trade." Child lays down the principle that "wherever Wages are high universally thro'out the whole World it is an infallible evidence of the Riches of that Country: and wherever Wages for Labour runs low, it is a proof of the Poverty of that Place."² The attempt to lower wages, he continues, can have only injurious results, and leads to an emigration of the people to countries where higher wages are paid.³ "It is true," says Child, "our Great Grandfathers did exercise such a Policy of endeavoring to retrench the price of Labour by a Law (although they never could affect it); we are since, with the rest of the Trading World, grown Wiser in this matter, and I hope shall so continue."⁴ At the same time, Child does not seem to have abandoned the old theory that high prices of food are good for the workman. In another passage he discusses the influence of dear food

¹ Overstone's *Select Collection*, p. 516.

² *A Discourse about Trade, wherein the Reduction of Interest of Money to 4l. per Centum is Recommended*, etc., etc. Never before printed. [By Josiah Child.] London, 1690, Preface, pp. 11, 12. The second edition, published in 1694, like all subsequent editions, is entitled *A New Discourse of Trade*. For Manley's views, see above, p. 31.

³ "If we retrench by Law the Labor of the People, we drive them from us to other Countries which give better Rates." — *Ibid.*

⁴ *Ibid.*, p. 13.

on industry very much in the style of the older writers.¹ He even goes so far as to speak about excises as conducing to thrift.² So that Child can scarcely be considered an opponent of the older theory so far as concerns its application to finance.

The clearest of the early writers to prove the economy of high wages was John Cary, whose views on another point have already been mentioned.³ Cary puts the problem as follows: "Whether the Price of Labour discourages our Manufactures or hinders Improvements in our Product?" He solves the problem by stating "that both our Product and Manufactures may be carried on to advantage without running down the labour of the Poor." He then proceeds to state his argument under two heads. First, as regards the productions of the soil, says Cary, it should be remembered that nominal wages must vary with the price of food.⁴ Therefore a reduction of wages implies a lowering of prices;

¹ "The Poor live better in the dearest Countries for Provisions, than in the cheapest, and better in a dear year than in a cheap, (especially in relation to the Publique Good), for that in a cheap year they will not work two days in a week; their humour being such, that they will not provide for a hard time; but just work so much and no more, as may maintain them in that mean condition to which they have been accustomed." This passage was first printed in Child's earlier work: *Brief Observations concerning Trade and Interest of Money*. By J. C. London, 1668, p. 11. It is reproduced in the *Discourse about Trade*, on p. 19 of the portion entitled "A Discourse concerning Trade." It also appears in the later editions.

² "The Abatement of Interest conjoynt with Excises upon our home consumption are two of the most comprehensive and effectual Sumptuary Laws that ever were established, and most necessitating and engaging any People to thriftiness, the high Road to Riches." — *A Discourse about Trade*, p. 27 of the part entitled "Trade and Interest of Money considered." It was probably these passages that caused Arthur Young in his *Farmer's Letters*, p. 29, to mention Child as having "concurred in the same observations" that he made. See above, p. 36.

³ See above, p. 26.

⁴ "As for the first, our Product, I am of opinion that the running down the Labour of the Poor is no advantage to it, nor is it to the Interest of England to do it, nor can the People of England live on such low Wages as they do in other Country; for we must consider that Wages must bear a Rate in all Nations according to the prices of Provisions." — *An Essay on the State of England*, etc. By John Cary. Bristol, 1695, p. 144.

and lower prices involve a diminution in the value of land. "You cannot fall Wages unless you fall Product, and if you fall Product, you must necessarily fall Land."¹ Secondly, as regards manufactured articles, he continues, people have only to look at them, to see that prices have been continually falling without any corresponding decrease in wages.² "But then the question will be, how this is done? I answer, It proceeds from the Ingenuity of the Manufacturer, and the Improvements he makes in his ways of working." He then proceeds to show how machinery effects this result,³ and concludes that "New Projections are every day set on foot to render the making of our Manufactures easie, which are made Cheap by the Heads of the Manufacturers, not by falling the Price of poor Peoples Labour."⁴

Although this most suggestive passage shows how old are some of the most modern views on industry, for some time comparatively little application of them was made to problems of taxation. We do, indeed, find in the ensuing decades some incidental allusions to the impolicy of taxing wages. Thus, one interesting writer states that "the labour of the meaner sort of people is of too great consequence to a trading Nation to be any way slighted or disregarded."⁵ A

¹ *An Essay on the State of England*, p. 145.

² "Observation, or Experience of what hath been done, we have and daily do see that it is so; the Refiners of Sugar lately sold for Six Pence per Pound what yielded twenty Years since Twelve Pence; the Distillers sell their Spirits for one third part of what they formerly did; Glass Bottles, Silk-Stockings and other Manufactures, (too many to be enumerated) are sold for half the Prices they were a few Years since, without falling the Labour of the Poor."—*Ibid.*

³ "All which save the Labour of many Hands, so the Wages of those employed need not be lessened."—*Ibid.*, p. 146.

⁴ *Ibid.*, p. 147.

⁵ This pamphleteer was opposed to the employment of foreigners. After showing the advantages of employing home workmen, he proceeds: "and since the very meanest under-workers in Wool contribute in some measure towards the support of the State, and the movement of the great wheels of Trade; it seems a peculiar hardship upon them, as well as inconsistency in the management of affairs here, first to put them under a necessity of raising their Wages, by taxing many of the necessaries of life; and afterwards to make the dearness of their labour, occasion'd by those Taxes, the very ground and reason of discouraging, or declin-

few years later, Nugent states emphatically: "one thing is certain, that no good can be produced by taxes upon commodities. They may starve the industrious, but they never will induce the idle and extravagant to labour and to save."¹ In the second quarter of the eighteenth century, however, a more vigorous attack was made on the premises as well as on the conclusions of the partisans of the excise.

Among the most important of these writers was Vanderlint. At first sight, he seems to maintain that prosperity can be attained only through a reduction of wages.² Yet, notwithstanding the fact that he demands an abolition of taxes on necessities for this reason,³ Vanderlint is in reality a strenuous advocate of higher remuneration for the workman. The lowering of wages at which he aims is merely a seeming reduction due to the abolition of taxes and to an increase in the money supply. Prices, he thinks, will fall still more,⁴ which of course means a relative rise in wages.⁵ Vanderlint is, in fact, a strong believer in the theory that a high standard of life for the laboring population is much to be desired.⁶ He

ing to make use of English hands, and of employing foreign (as in this view we must account Irish) hands in their stead." — *The Grasiers' Complaint and Petition for Redress: or the Necessity of Restraining Irish Wool and Yarn; and of Raising and Supporting the Price of Wool of the Growth of Great Britain considered*. By a Lincolnshire Grasier. London, 1726, pp. 44, 45.

¹ *Considerations upon a Reduction of the Land Tax*. [By Robert Nugent.] London, 1749, p. 17.

² "Reducing the present Rates of Labour appears to me absolutely necessary to increase . . . Trade." — Preface to *Money answers all Things: or, an Essay to make Money sufficiently Plentiful amongst all Ranks of People, and Increase our Foreign and Domestick Trade, Fill the Empty Houses with Inhabitants, Encourage the Marriage State, Lessen the Number of Hawkers and Pedlars, and in a great measure, prevent giving long Credit, and making bad Debts in Trade*. By Jacob Vanderlint. London, 1734.

³ "I do verily believe that taking the Taxes intirely off the Things the working People consume is so absolutely needful, that Labour can hardly be reduced without it." — *Ibid.*, p. 159.

⁴ This is shown, among other things, by the title of the work. It was this grievous error about money which served to consign the book to oblivion, notwithstanding its many good points. ⁵ *Ibid.*, pp. 34, 69, and esp. 86, 87.

⁶ Among the reasons advanced is that higher wages will conduce to better work: "The working People can and will do a great deal more Work than they

is even the first writer to advance a doctrine that has only recently come into prominence — the doctrine that as the laborers form the mass of consumers, the large consumption which gives the impetus to profitable production and general prosperity itself depends on the purchasing power of the consumers,—that is, on the high wages and the high standard of life among the laborers.¹

Twenty years later, Sir John Nickolls went to the root of the matter when he stated,² "We have flattered ourselves too much, if we have believed that on augmenting the taxes upon the consumption, we should bring our workmen to the sobriety, or frugality of a Frenchman, who lives, or rather starves, upon roots, chestnuts, bread and water; or to the thriftiness of a Dutchman, who contents himself with dried fish, and butter-milk. When our workmen can no longer raise the price of their work to their mind, there still remain two great refuges to them from labor, the Parish and Robbing."³

The most popular exponent of the newer doctrine was Postlethwayt. In a passage which is practically a plagiarism of the one just quoted from Nickolls, Postlethwayt objects to taxes on the mass of consumers.⁴ It is true, indeed, he says,

do, if they were sufficiently encouraged. For I take it for a Maxim, that the People of no Class will ever want Industry, if they don't want Encouragement." — *Ibid.*, pp. 122, 123.

¹ He objects to any scheme for "making the Poor fare harder, or consume less than their reasonable Wants in that Station require; for they, being the Bulk of Mankind, would in this Case affect the Consumption of Things in general so mightily, that there would be a Want of Trade and Business amongst the other Part of the People." — *Ibid.*, p. 69, note. (In reality this should be page 61, as the headings of pp. 65-72 are printed twice by mistake.) Cf. p. 81.

² *Remarks on the Advantages and Disadvantages of France and of Great Britain with Respect to Commerce.* 1754. See above, p. 29, note 1.

³ *Ibid.*, pp. 261, 162.

⁴ "Augmenting Taxes on our Consumption, has not brought our Workmen to the Sobriety or Frugality of a Frenchman or to the Thriftiness of a Dutchman: and when our Workmen cannot raise the Price of their Labor and Workmanship to the Degree they would, they have recourse to the Parish or Robbery." — *Great Britain's True System.* By Malachy Postlethwayt, Esq. London, 1757, p. 160. For the full title, see below, p. 62.

that wages are fixed by the price of food.¹ But the increase of wages due to a tax will increase, not decrease, the cost of production, and will put the country at a disadvantage in competition with foreigners. The result will be the ruin of the whole community, of course including the laboring class. An artificial rise in wages through taxation, in his opinion, gives "superaddition of value" to the country's products, which can only be harmful to all concerned.² But, as he points out in another work, high wages and leisure for the workman, when created by natural causes, are the surest guarantee of good work and bountiful production.³ Massie, another popular writer of the same period, expressed a similar conclusion very forcibly in the title of a work designed to prove that the excise would be a "pinchbelly tax" to the workingmen.⁴

The point could not have been put more plainly than by Nathaniel Forster, who pours out the vial of his wrath upon those persons who have "the hardiness to assert that high taxes upon the necessities of life contribute in their consequences even to the more plentiful production of them and that the poor will be industrious only in the degree that they are necessitous."⁵ Forster terms this "a doctrine which

¹ "Where Food and Cloathing, the Necessaries for a Day, are purchased for a little, there Wages will be low, or Labor Cheap." — *Great Britain's True System*, p. 144.

² "When the general Price of Labor soars above its natural Standard, and thereby an artificial Value is superadded to our Produce and Manufacture, beyond which our Rivals do, we must lose our Dominion in Trade; and our Ruin then cannot be far distant: and this Superaddition of Value to our Commodities arises solely from the *Modus* wherein our Taxes are laid and raised." — *Ibid.*, p. 158.

³ *The Universal Dictionary of Trade and Commerce*. London, 1751, vol. i, Preliminary Discourse.

⁴ *Reasons humbly offered against laying any further tax upon Malt or Beer, shewing that such a tax would not only cause great Losses to the Landholders of England, but be prejudicial to several branches of our Manufactures, and prove a pinchbelly Tax to some hundred thousand Families of Labouring People*. By J. Massie. London, 1760. For other views of Massie, see below, pp. 63, 64.

⁵ *An Enquiry into the Causes of the Present High Price of Provisions. In Two Parts: I Of the General Causes of this Evil; II Of the Causes of it in some particular Instances*. [By Nathaniel Forster.] London, 1767, p. 49.

avarice in private life has greedily seized, and has not failed to improve to its own purposes." "But it is a doctrine," he adds, "as false, as it is inhuman."¹ He proceeds to show that it is necessarily false; for, says he, if harder work means lower wages, taxes will lead not to industry, but to the reverse.²

This marked the turning-point in the controversy. Some authors, like Tucker, were now convinced that their previous views had been erroneous. Tucker, in fact, wrote a special tract designed to prove that countries where high wages are paid can successfully compete with those in which the rate of wages is low.³ Higher wages, says he, do not necessarily imply greater cost of production, for the larger remuneration of the laborer is compensated by his greater skill. "Is it not much cheaper," asks Tucker, "to give 2s. 6d. a Day in the rich Country to the nimble and adroit Artist, than it is to give only 6d. in the poor one, to the tedious, awkward Bungler."⁴ In the same way Schomberg expresses the newer theory in the statement that "labour in a country of low wages is comparatively dearer, than where wages are high."⁵

Thus we see that in the third quarter of the eighteenth century the belief that taxes on labor would benefit the community by acting as a spur to industry was seriously shaken. When this doubt was reinforced by the more general theory already discussed,⁶ that taxes on the poor are a hardship for

¹ *An Enquiry into the Causes of the Present High Price of Provisions*, p. 55.

² "If a man sees that the harder he labours, the higher he shall be taxed, or if he finds in private life that his wages are lowered in proportion to his industry, is it in nature that either of these circumstances should tend to increase his industry? They must always have a contrary effect, and will necessarily crush and extinguish it." — *Ibid.*, p. 58.

³ *Four Tracts on Political and Commercial Subjects*. By Josiah Tucker, D.D. 2d ed., 1774. Tract I: "Whether a rich Country can stand a Competition with a poor Country (of equal natural Advantages) in raising of Provisions and Cheapness of Manufactures."

⁴ *Ibid.*, p. 34.

⁵ *Historical and Political Remarks upon the Tariff of the Commercial Treaty: With Preliminary Observations*. [By A. C. Schomberg.] London, 1787, pp. 156 *et seq.*

⁶ See above, pp. 26–28.

them, whatever be the result on the community at large, the day of complete confidence in the excise had gone by. The point to be emphasized is that the advocates, as well as the opponents of the excise,¹ agreed as to their theory of incidence; and that some defended, while others objected to, this system of the taxation of necessities precisely because, in their opinion, it rested on the poor. Their general doctrine of incidence, in short, was that the excise rests on the mass of the consumers.

3. *The Excise is shifted to the Landowners*

As compared with the writers discussed in the previous section, there were few who maintained that the incidence of the excise as such is on the landowner. There were, indeed, some influential thinkers who held that all taxes are shifted to the land.² But the special doctrine which singled out excises as the particular taxes that finally rest on land met with comparatively little support.

Probably the first writer to advance this theory was an anonymous pamphleteer of the last decade of the seventeenth century. He is concerned especially with "a Home-Excise upon things eatable and drinkable, and several other Merchandizes which are sold in the Market."³ The ordinary statement that an excise, which he calls "a troublesome and slavish sort of Tax,"⁴ rests on the consumer is declared by him to be an error. For example, the more the farmer has to pay for the commodities of his own consumption, says he, the less he will be able to pay as rent.⁵ The farmers and the land-

¹ With the exception of Vanderlint, whose attitude is explained below, p. 76.

² See below, pp. 71 *et seq.*

³ *Some Considerations about the most proper Way of Raising Money in the Present Conjuncture.* London, 1692, p. 15.

⁴ *Ibid.*, p. 27.

⁵ "The common argument for an Excise, That it will spare our Lands; is grounded upon a false Supposition: This is not a sparing our Lands, but a charging them for ever with double what is needful. The dearer the Farmer pays for his Commodities, the less Rent he will pay; and the less his Product yields him

owners, moreover, will be the only ones to suffer. For if a tax be imposed on some of the farmer's own products, as for instance on malt, he will have to bear the greater part or the whole of the tax, because otherwise there would be a considerable falling off in the demand and a consequent diminution of price. The brewers will be the real gainers, for they will get their raw material cheap and will sell the finished product at the old price.¹ The author, it thus appears, is not very clear in explaining why a tax would cause the price of manufactured articles to rise, but would have no such effect on agricultural products.

Another writer of the same period makes the statement that "A General Excise upon Home Commodities is a real Land Tax, and will have the same Influence upon the Value of Lands and Rents, as that we call a Land Tax, or Monthly Assessment hath."² He is aware of the general principle that prices fall with the increase of supply;³ but he thinks that the supply of commodities in England is so great that the market is at the mercy of the purchaser.⁴ A tax on com-

clear, accordingly he must value his Farm. The more (for example) is laid on Lead, the less will Woods and Oar yield; and so of other Commodities." — *Ibid.*, p. 28.

¹ "It is evident, this Tax will fall very hard everywhere upon the poor Farmers; and those who are best able to pay it, will be most spared: For example, if an Excise should be laid upon Malt, where will the Burden lye? The price of it will certainly sink in the Countrey, for want of Consumption, by reason of the new Imposition. The Brewers in great Cities and Towns . . . will be the only Gainers, since they will buy their Malt cheap, and sell their drink as dear or dearer than before. And the poor Farmer will bear the loss." — *Ibid.*, p. 29.

² *An Essay upon Taxes, calculated for the Present Juncture of Affairs in England*. London, 1693, p. 10. The copy in the possession of the present writer is ascribed by its former possessor, but probably without reason, to Sir William Temple.

³ "If the Necessity of the Buyer be greater than the Seller, the Market will rise; but if that of the Seller be greater than the Buyer, the Price of Commodities must fall; and any Duty laid upon Commodities will lye upon either accordingly." — *Ibid.*, pp. 12-12.

⁴ "But as to the present Case in England, I think that there is nothing more apparent, than the Plenty of Home Commodities, and the want of People to consume them . . . ; the consequence of which necessarily will be, That whatever Duty is impos'd upon the Commodity, the Buyer will have it so much the cheaper." — *Ibid.*, p. 12.

modities, therefore, must fall on the producer or seller; and, since everything is a product of the land, a tax on products is a tax on land.¹

At the time of the controversy over Walpole's excise scheme, we find the same views in a number of pamphlets designed to show the injurious consequences of the tax. Of these, the ablest are by Pulteney² and D'Anvers.³ Few of these writers distinguish, in their discussions of the incidence of the tax, between the landlord and the farmer who rents the land. One writer, however, goes into the question a little more fully. He maintains that just as a land tax levied on the occupier or farmer is shifted to the owner of the land,⁴ so an excise tax, — for instance on salt, — even though it reach the farmer, is ultimately paid by the landlord through a fall in rent.⁵ Even assuming, however, that the excise is shifted to the poor consumer, he will not suffer in the long run. For if the excise takes the place of the land tax, the landlord will have more to spend "in Hospitality" as well as

¹ "A general Excise and a Land Tax differ not essentially, since both are a Duty upon the same Commodities, which are the Product of Land." — *An Essay upon Taxes, etc.*, p. 11. As the object of the author is to diminish the burden upon land, he therefore favors a general property tax. See below, p. 68.

² *The Case of the Revival of the Salt Duty fully stated and considered with some Remarks on the Present State of affairs, in answer to a late Pamphlet intitled a Letter to a Freeholder on the Reduction of the Land Tax to one Shilling in the Pound.* In a Letter from a Member of the House to a Gentleman in the Country. [By William Pulteney.] London, 1732. The author quotes Locke's statement that all taxes fall on land, but adds: "I could cite a great deal more to the same Purpose . . . ; but I chuse to decline it, lest I should be represented as an Advocate for Land Taxes; whereas my great Desire is that our Taxes in general may be lessen'd." — p. 49. Cf. his views as to the effect of taxes on necessities and wages, p. 54.

³ *An Argument against Excises, in several Essays lately published in the Craftsman, and now collected together.* By Caleb D'Anvers of Gray's Inn, Esq. London, 2d ed., 1733. See especially pp. 67 and 76.

⁴ "Tho these Charges are paid immediately by the occupier, yet they fall ultimately on the Landlord; who is obliged on these accounts to let his Land so much the cheaper." — *The Case of the Salt-Duty and Land-Tax offered to the Consideration of every Freeholder.* London, 1732, p. 10.

⁵ "It is a Tax that does not affect the Farmer, for he hires his Land the cheaper of his Landlord." — *Ibid.*, p. 11.

in the "Improvement of his Estates"; and the laborer will be the person to reap the benefit.¹ The honesty of our author's statements, as well as his logic, is, however, open to criticism; for while the other writers object to the excises because they affect the landed interest, he is strongly in favor of the scheme, while at the same time he is strenuously opposed to any increase in the land tax.²

4. *The Excise rests on the Traders*

Our survey of the different views held as to the excise would not be complete without mentioning those writers who maintained that the tax was not shifted at all, but rested on the merchant who paid it first. This doctrine was put forward with especial emphasis at the time of Walpole's excise scheme by its opponents, who were desirous of marshalling every possible argument against the plan.

One of the most vehement pamphleteers, for instance, objects to the "bondage merchants suffer," after exposing themselves to the dangers of the sea, and after paying import duties "by not being permitted to deliver their Goods after Sale without paying an imposed Penalty by Way of Excise."³

¹ If the dealer pays the duty, he shifts it to the consumer. "Who then is the Sufferer. If anybody, it is the Labourer: but it will be found that he has no reason to complain." — *Ibid.*, p. 13.

² The land tax he calls a "partial tax," for "every one knows that Personal Estates are seldom or never charged: for Money is of a transitory Nature; it shifts so often from Place to Place, and Person to Person, that 'tis impossible to know where, or in whose hands to charge it." — *Ibid.*, p. 9. Furthermore, it is in his opinion very unequal in different parts of the Kingdom. Cf. p. 16. He proposes accordingly a freeing of the land, and thinks that "it might be done by laying a Tax, either on one or two Species of Commodities in common use, or on some favourite vanities of Mankind." — *Ibid.*, p. 17.

³ "As if," he adds, "the Trade of a Merchant should now be looked upon as guilty of some high Crimination, and therefore fitting to be manacled and awed with the Bonds of slavish Restraint; . . . as if those Goods which the Merchant hath purchased in foreign Parts, were not as properly his as the Gentlemens Houses and Lands." — *Excise anatomiz'd. Declaring that unequal Imposition of Excise to be the only Cause of the Ruin of Trade, the universal Impoverishment, and destructive to the Liberties of the whole Nation.* By Z. G., A Well-wisher of the common good. London, 1733, p. 5.

The dealer, he contends, is thus made to suffer all manner of delay and inconvenience, and often loses the chance of a sale. He discusses, in picturesque language, nine objections to the excise,¹ and finds that it errs most grievously "by the disproportionableness and inequality of its Imposition, by laying the greatest Weight and Burthen on the Back of Trade, thereby utterly disheartening the most ingenious and industrious Party."² He is not weary of speaking of the tax as "that detestable and so often damned Imposition of Excise."³ The vehemence of the writer's language in describing the nine inequalities of the excise is paralleled in English literature only by the author (who signs himself Thrasybulus) of a much later work which paints in lurid colors the thirty-three defects of the excise.⁴

¹ He speaks of the excisemen as those "who like ravenous wolves (using the Law of Excise for their Sheep's Cloathing) will not satisfy their insatiable Appetites with less than the greater Part (of the merchants' property)." — *Excise anatomis'd*, p. 6. He speaks of other officials as "those deformed Monsters of this Age, cloak'd with the Name of Farmers of the Excise, whose insolent Vileness, and exhausting Oppressions, transcends all former Ages." — *Ibid.*, p. 9.

² *Ibid.*, p. 4. "The Merchant and Trader," he adds elsewhere, "stands in as much Fear of the Excise-Man, as the Welsh Traveller did of his Host, when being at Supper, and finding amongst his Eggs, one with a chick in it, hastily supp'd it up, for fear, lest his Host seeing it, might make him pay a Groat for it." — *Ibid.*, p. 9.

³ *Ibid.*, p. 19. As its consequence "all our former flourishing Tranquility is become a Skeleton of Dry Bones." — p. 11.

⁴ Cf. *Six Letters on Excise, and particularly on the Act passed in 1789, for subjecting the Manufactures of and Dealers in Tobacco and Snuff to the Laws of Excise*. London, 1790. From the ninety-two pages of invective the following may be quoted as samples, although no attempt is here made to reproduce the reasoning. The proposition for the excise is "dangerous, oppressive and unconstitutional," "alarming," "subversive of freedom," "fraught with impolicy," "inconsistent with political wisdom and equity," "pregnant with danger," "replete with blindest folly and indiscretion," "of essential injury to piety and religion," "perpetually inimical to happiness," "a glaring violation of sacred principles," "impervious in its spirit and troublesome in its operation," "conspicuous for inhumanity," "a source of great mortification and irretrievable disadvantage," "an unparalleled oppression," "unjustly rigorous and meanly ensnaring," "in an eminent degree ridiculous and contemptible," "totally inadmissible," "precipitate and unnecessary," "utterly inexpedient," "fundamentally improper," "in no measure adequate to the end proposed," "rash and

Another controversialist, D'Anvers, tried to cover two positions. He did not deny that excises were shifted to the consumer, but he contended that they hurt the trader as well. "Will this Gentleman pretend," he said, referring to an opponent, "that Taxes bring no Burthen, no Difficulty or Loss upon the Trader, by taking the Money immediately out of his Pocket, which He could otherwise employ to great Advantage, and giving a Check to the Circulation of his Trade."¹ D'Anvers laid down his general conclusion in the words "Taxes on Trade have already deprived us of some valuable Branches of it."²

It may be queried, however, whether D'Anvers really meant anything more than that taxes on trade are frequently injurious to the general interests of commerce — an opinion, common enough in the writings of the seventeenth century, which can be found well expressed in the celebrated work of Lewes Roberts.³ But the more precise question as to the exact incidence of taxes on trade was more fully discussed in connection with the duties laid on colonial sugar. It may be interesting to mention a few of these writers, all of whom maintain that the tax rests on the seller or sugar-planter.

The clear-headed author of one seventeenth-century tract declares the assertion that the new sugar duty will be paid by the buyer "a meer Mockery." For, "if an Impost be laid impolitic," "essentially hostile to the fair trade," and "permanently disadvantageous to the revenue." See esp. pp. 1-22.

¹ He adds: "It is the Plenty, or Scarcity of any Commodity, in Proportion to its Vent and Demand, which must always rule in these Cases, and by which the Trader will make more or less Profit in his Dealings." — *The Second Part of an Argument against Excises; in answer to the Objections of several Writers.* By Caleb D'Anvers of Gray's Inn, Esq. London, 1733, p. 19.

² *Ibid.*, p. 20. See also p. 41.

³ "When the customes upon Merchants goods is small, it easily draweth all nations to trade with them; and contrariwise, where great impositions are laid upon Merchants goods the traffike of the place, will be seen soone to decay, to the prejudice of that place and Kingdom." — *The Treasure of Traffike, or a Discourse of Forraigne Trade. Wherein is shewed the benefit and commoditie arising to a Common-Wealth or Kingdome, by the skilfull Merchant, and by a well ordered Commerce and regular Traffike.* By Lewes Roberts, Merchant and Captaine of the City of London. London, 1641, p. 61.

upon the Sugar, whoever pays it the Planter is sure to bear it. What avails it though the Buyer pays the Duty, if the Seller must presently allow it in the Price."¹ Where the price of the article is practically fixed, he adds, as in the case of beer, the brewer can easily add the tax to the price. But where "the Price is uncertain, and a Bargain is to be driven, and a Duty yet to be paid," the matter is very different. For competition will compel the seller to take less.² The general principle, he thinks, can be put as follows: "'Tis not Impositions, but Plenty and Scarcity, that rules the Market. And it is found by constant Experience, that where an Impost is laid upon a Commodity in demand, there the Buyer may be brought to bear some part of it. But if the Market be glutted, and the Commodity be a Drug (as Ours is, and for ever will be); in this case the Buyer will bear no part of the Duty, but the Seller must pay it all."³

In the fourth decade of the eighteenth century, the project of a new duty on sugar led to a reconsideration of the question. A number of writers now contended that the sugar duty would be borne by the seller. To the extent that the seller happened to be the planter, the theory would be equivalent to the one discussed in the last section — the theory, namely, that the landowner would bear the burden. For in this case the sugar planter would be at once the landowner and the trader. Thus one pamphlet, written to prove that the duty rests on the sugar-planter, argues that the important consideration is the possible restriction of the supply. "Every

¹ *The Groans of the Plantations: or, a true Account of their Grievous and Extreme Sufferings by the Heavy Impositions upon Sugar, and other Hardships*, etc. London, 1689 (reprinted 1698), p. 9.

² "'Tis not the Appointment of Law, but the Agreement of the Parties that must decide the question. In our Case the Buyer will naturally be at this lock: If you clear the Duty, I will give you so much for a Hundred of your White Sugar; if I must pay it you must have seven Shillings less. Which is as broad as long.

"The Buyer, they say, must pay the Duty, but sure the Seller may pay it if he please. And he will please to pay it, rather then not sell his Sugar. If He will not, there are enow beside that will." — *Ibid.*, p. 9.

³ *Ibid.*, p. 10

one admits," says the author, "that Quantity and Vent give a Price to any Commodity; it is therefore to be considered in what Cases the Quantity can be commanded or ascertained, in proportion to the Vent, and in what Cases it cannot; for where it can, the Duties will lie on the Consumer; but where it cannot, it will evidently lie on the Producer or Maker as often as the Quantity exceeds the Vent."¹ He then proceeds to show by specific figures that in the case of sugar the latter is true.² Another writer on the same subject lays down the general principle in similar language;³ and John Ashley, who comes to a like conclusion, states that "Experience hath shewn, that all Duties laid upon Sugar affects the Producer more than the Consumer."⁴ One of the last of the pamphleteers on this topic discusses the statement that the taxes will be shifted to the consumer, but urges in opposition that the price of sugar fluctuates according to the quantity imported into the marts of Europe, without reference to taxes imposed at any particular place.⁵ Since it is far more difficult in the case of sugar than in that of other commodities to apportion the supply to the demand,

¹ *The Axe (once more) Laid to the Root of the Tree. Published for the universal Benefit of Mankind and dedicated to the Landholders of the British Dominions.* By a Friend to Truth and the Christian Religion. London, 1743, pp. 1-2 of *A Supplement on Taxes in General on British Sugar.*

² *Ibid.*, pp. 9 and 21 of the *Supplement.*

³ "The Seller of a necessary Commodity can oblige the Buyer to pay it's Taxes, in case the Quantity at Market is only equal to the Vent or Demand. On the contrary, when the Quantity at Market much exceeds the Vent or Demand, this is absolutely out of the Seller's Power; for the Plenty will influence, and keep down the Price, in spite of his utmost Endeavours." — *Considerations against laying any New Duty upon Sugar, wherein is particularly shewn, That a New Imposition will be ruinous to the Sugar Colonies.* London, 1744, p. 7.

⁴ *The Second Part of Memoirs and Considerations concerning the Trade and Revenues of the British Colonies in America.* By John Ashley, Esq. London, 1743, p. 79.

⁵ "Thus it appears that the Price of Sugar fluctuates according to the Quantity imported into Europe, without any regard to any advanced Duties." — *The State of the Sugar Trade; shewing the Dangerous Consequences that must attend any additional Duty thereon.* London, 1747, p. 4.

he thinks the net result will be that the taxes will finally fall on the planter.¹

Reviewing the authors treated in this chapter, we see that the discussion of the excise called forth almost every conceivable theory as to its incidence. Some thought that the tax was not shifted at all, some maintained that it was shifted to the landowner, some believed that it was shifted to the consumer, and some contended that it was again shifted by these to the employers of labor. These views were advanced with all degrees of confidence—but, with few exceptions, with little grasp of fundamental economic principles. Among the assertions and proofs, however, we found here and there some interesting premonitions of modern theories. Although we cannot speak of any unanimous or authoritative doctrine, the better opinion, as we have seen, and the one which gradually gained an ever-increasing number of adherents, was that the excise tends to be shifted to the consumer, and that it augments the burdens resting on the mass of the laborers. In this way scientific opinion gradually came to harmonize with the popular view.

¹ "Nor can the Quantity be proportioned or ascertain'd according to the Demand, as in the Case of many other Commodities, from the great Charge in settling a Sugar-Plantation, the long growth of the Sugar Cane, the uncertain Produce, and many other Reasons." His conclusion thus is that "the Price of Sugar is govern'd by the Quantity and that the Duties lie on the Planters." — *The State of the Sugar Trade*, pp. 4, 6. Cf. p. 16. A similar argument may be found in *Reasons, grounded on Facts, shewing that a new Duty on Sugar must fall on the Planter, and that a new Duty will not certainly encrease the Revenue*. London, 1748.

CHAPTER II

THOSE WHO FAVOR A SINGLE TAX ON LUXURIES

As we have already seen, confidence in the general excise—in the sense of a tax on the producer or dealer,—which was deemed by the great mass of writers to be an indirect tax on the consumer, gradually weakened during the eighteenth century. Partly because it was no longer deemed equitable that the poorer consumers should bear the burden, partly because it was supposed that these taxes were prejudicial to trade, the idea of an indirect tax on consumption in general was now replaced by that of a direct tax on certain particular kinds of expenditure. Instead of levying a tax in first instance on the producer or dealer, it was now proposed to lay one directly on the consumer; and instead of making the general consumer bear the burden, it was planned to tax only the purchaser of certain luxuries. In short, in lieu of an indirect tax on necessities, we now meet with the scheme of a direct tax on luxuries.

The earliest inkling of such a plan is probably to be found in a seventeenth-century work of Chamberlayne. This writer gives all the details of a scheme which he sums up in the proposition that “upon all such Commodities as occasion either Excess or Luxury, Wantonness, Idleness, Pride or Corruption of Manners there may be laid a large and extraordinary Impost.”¹ But from his reference to “the practice of neighbour Nations” it is not quite certain whether Chamberlayne is here speaking of a direct or an indirect tax on luxuries.

¹ *Englands Wants or several Proposals probably Beneficial for England, humbly offered to the Consideration of all good Patriots in both Houses of Parliament.* By a true Lover of his Country. [Edward Chamberlayne.] London, 1667, p. 4.

This doubt, however, does not exist in the case of another writer, toward the end of the century, who was careful to recommend taxes on commodities "payable by the Buyer" or "Consumptioner."¹ That he refers to luxuries appears clearly from his statement that, according to the scheme as elaborated in the monograph, "all Persons Tax themselves according to such Degrees as their Extravagancies shall prompt to exceed the Decent and Necessary Uses of them." The author discusses the objection that, as the purchaser is apt to be overreached anyway, the tax ought to be paid by the "seller who gets prophet."² His reply is threefold: first, if the goods are not sold, the dealer pays nothing; second, the seller is under no temptation to increase the price by more than the tax; third, there is less chance of evasion.³ The tax, he concludes, rests where it is imposed, and cannot be shifted.

During the seventeenth century, these isolated proposals met with little support. It was not until shortly before the middle of the eighteenth century that the doctrine was put forward in so authoritative a manner as to command attention.

The plan of a single tax on luxuries was unfolded in an anonymous work,⁴ the authorship of which is doubtful

¹ *To the Honourable the Knights, Citizens, and Burgesses of the House of Commons in Parliament assembled, Proposals most humbly offered for Raising (in all Likelihood) upwards of Five Millions of Money, without Charging the Poor, or Burthening the Rich, by such Ways and Means, that (for the greatest part thereof) the Payers will voluntarily Tax themselves.* [By J. M.] London, 1696, p. 1.

² "It may probably be objected, that 'twill be hard on the Buyer, who parts with his Money for anything herein named, to pay the Tax, when perhaps he may be out-reach'd in the price; therefore more reasonable to be paid by the seller who gets prophet." — *Ibid.*, pp. 4, 5.

³ "The Answer hereunto is Obvious, if Consider'd, that first, none will be Burthen'd with Taxes for any Commoditie, that lies on hand dead and unsold: Secondly the seller is debarr'd of any Just pretensions for Inhancing the price thereof, beyond the usual Value . . . and Lastly, the Tax will more certainly be pay'd, for no seller will put himself at the Mercy of any Informing Buyer, since it comes not out of his, but the Buyers Pocket." — *Ibid.*, p. 5.

⁴ *An Essay on the Causes of the Decline of the Foreign Trade, consequently of the Value of Lands of Britain and on the Means to Restore Both.* Begun in the Year 1739. London, 1744.

even to this day. By some it is ascribed to Richardson, by others to Decker, with the probabilities in favor of the former.¹ The author was careful to emphasize his opposition to general excise duties "because of the great prejudice they do to trade." His plan was to lay "One Tax on the Consumers of Luxuries and take off all our other Taxes, Excises, and Customs."² He gave a catalogue of the few articles he wished to have taxed.³ It goes without saying that, in his opinion, the tax would remain where it was put. "The greatest benefit of All," he added, "is that this Proposal hath not those extending, pernicious, Trade-

¹ For the grounds on which the authorship is ascribed to Decker rather than to Richardson, see the article in Palgrave's *Dictionary of Political Economy*, i, p. 519. To the authorities quoted there may be added the statements in Tucker, *A Brief Essay on Trade*, 1750, pp. 129-149; in Nickolls, *Remarks on the Advantages and Disadvantages*, etc. (quoted a few notes below), pp. 264 and 268; and in Arthur Young, *Political Arithmetic*, p. 244, in all of which it is also ascribed to Decker. Professor Gonner, the author of the article in the *Dictionary*, states that the edition of 1749 bears Decker's name on the title-page. It is to be remarked, however, that the later (Edinburgh) edition of 1756 (a copy of which, together with one of the original edition, is in the possession of the present writer) is anonymous. The strongest argument against its ascription to Decker is that Decker is known to be the author of another tract of almost the same date advocating a single tax on houses (see below, pp. 60, 61), and that, in many works of the fifties and sixties, when Decker's scheme is mentioned at all, the reference is to the house tax. See especially below, pp. 62, 63. It seems improbable that two such different projects should have been advanced by the same writer, without making in the later work any reference at all to the plan of the former. Professor Cunningham is also of the opinion that Decker cannot be the author. See *The Growth of English Industry and Commerce in Modern Times*, 1892, p. 409, note 3. At the same time, it is to be noted that Arthur Young in his *Political Arithmetic* ascribes both works to Decker, and speaks (p. 214) of the tax on houses as Decker's "favorite scheme." Yet it was the earlier one, or at all events the one first published.

² *An Essay, etc.*, p. 44.

³ Adam Smith, who refers to his "well known proposal" to tax "all commodities" (*Wealth of Nations*, book v, chap. ii; Rogers' ed. ii, p. 474), as well as Bastable (*Public Finance*, 2d ed., 1895, p. 318), who speaks of his "plan of a license for the consumption of commodities," are not quite exact. For the plan was not to tax "commodities" or "all commodities," but only certain "articles of luxury." One of the chief recommendations of the scheme to the author is that it will act as a "Sumptuary-Law to keep all People in their proper Stations." — *An Essay, etc.*, p. 51.

destroying Consequences of our present Taxes; for it will not raise the Value of any one Commodity, but rather, by checking Luxury, the Bane of Virtue and Industry, we shall become a rich and flourishing People.”¹

An enthusiastic advocate of this scheme for a single tax is to be found in Josiah Tucker, who outlined the plan in an appendix to one of his important works.² Tucker’s chief reason for the proposal is contained in his general principle that “it is just and reasonable each Person should pay in proportion to what he Uses of any Commodity: Now the most probable Grounds we can go upon (for the affair will not admit of Certainty and Demonstration) is, That Persons in general live in Proportion to the Figure they make.”³ Hence to tax a man according to his expenditures for luxuries constitutes the most equitable method of taxation. Another advocate of the scheme was Nickolls,⁴ whose reasons for opposition to the general excise have already been mentioned.⁵ After giving an interesting statement of his general philosophy of taxation,⁶ he concludes that “a free tax bearing solely upon the different articles of luxury, and consumption (those of absolute necessity excepted) seems the properest to fulfill these intentions.” He approves the

¹ *An Essay, etc.*, p. 52.

² *A Brief Essay on the Advantages and Disadvantages which respectively attend France and Great Britain with Regard to Trade*. The appendix is entitled *An Appendix containing a Plan for raising one only Tax on the Consumers of Luxuries*. [By Josiah Tucker.] London, 2d ed., 1750. See esp. pp. 123-135 and 145-166.

³ *Ibid.*, p. 153.

⁴ *Remarks on the Advantages and Disadvantages of France and Great Britain, etc.* [By Sir John Nickolls.] London, 1754.

⁵ Above, p. 29, where the exact title is given.

⁶ “The consideration of the different taxes which constitute the Revenue of the State, and of the inconveniences of each, naturally leads a Patriot to the desire of finding the means of taxing all the articles which could, and ought to be made contribute, in the justest, easiest, equalest manner, to the Public charge; that is to say, of taxing every subject in proportion to the advantage he draws from Society: insomuch, that with respect to him who has no property, so far from depriving him of the hopes of acquiring any, the influence of the taxes should be no more than a gentle spur to his industry, and that it should fall reasonably, and

scheme as developed by its original author,¹ and favors it especially because the amount spent on each class of luxuries may be regarded as a rough index of the income enjoyed and disposable for such a purpose.² Finally, among the other writers who favored this plan, which was soon adopted, — not, indeed, as a single tax, but as a supplement to existing taxes, — may be mentioned Forster, the determined opponent of all taxes on wages, and to a certain extent Postlethwayt.³ With the incorporation of certain taxes on luxuries into the general scheme of the English revenue system, the discussion of the proposition soon ceased.

not arbitrarily upon those who have some property, that is to say, in proportion to the real and personal estates they enjoy." — *Ibid.*, pp. 268, 269.

¹ Nickolls ascribes it to Decker.

² "He takes each of these articles for the sign of a fortune of such a certain revenue, upon which he is imposing a tax of three pence for every pound sterling." — *Ibid.*, p. 269.

³ *An Enquiry into the Causes of the Present High Prices of Provisions*. [By Nathaniel Forster.] London, 1767. Part I, chap. iii, "Of Taxes," pp. 50-53. For the modified advocacy of Postlethwayt, see below, p. 62.

CHAPTER III

THOSE WHO FAVOR A SINGLE TAX ON HOUSES

THE revenue reformers of the eighteenth century were fond of schemes for a single tax. Once granted that taxes on consumption rest on the consumer, and that it is wise to avoid the incidental interference with trade which would result from taxes levied on the trader, it was but a step further to contend that a single tax on luxuries, which at all events necessitates a scrutiny into the luxurious expenditures, might be improved upon. By taking some one criterion of expenditure, which was not only universal but patent to all, the same results might be reached with much less difficulty. The desired criterion, it was now suggested, was the building occupied. Instead of a general excise, it was proposed to lay a single tax on houses.

The chief advocate of this scheme was Sir Matthew Decker.¹ He starts out with the idea of a tax or license duty on the consumers of tea, to replace the tax on the importers or dealers. But, passing by this as a matter of minor importance, he proceeds to make the suggestion for a "general excise." This, he is careful to explain, differs entirely from what is generally associated with that name. His scheme, so he tells us, means only "one single Excise-Duty, and that upon Houses."² He discusses its characteristics at great length, and states its chief merits as follows:

¹ *Serious Considerations on the several High Duties which the Nation in general (as well as its Trade in particular) labours under : with a Proposal for preventing the Running of Goods, discharging the Trader from any Search, and raising all the Publick Supplies by One Single Tax.* By a Well-Wisher to the Good People of Great Britain. [Sir Matthew Decker.] London, 1743.

² *Ibid.*, p. 15.

"All Duties being abolished, it would prevent all Manner of Running and hinder the Ruin of many Thousands of poor unhappy Creatures, which have been, or are still employed in the Smuggling Trade"; furthermore, "it would set the Merchant and Shopkeeper free from a Multitude of false and vexatious, or frivolous Informations, which may now be lodged against them"; and, above all, it would enable "the Merchant as well as Shop and Warehouse-Keeper to trade with Half the Stock, and make his Profit the same, or rather increase it."¹

Everywhere we find the emphasis put on the interests of production and trade, because of the opinion that, in the long run, these interests are the important ones to be considered. This appears clearly from his views as to taxes on the workmen. Although Decker, indeed, desires to exempt the houses "of the lowest and poorest Sort of People," he puts his demand on the express ground that "thereby their Labour might become so much the cheaper."² The incidence of taxes on necessities, therefore, according to Decker, is really on the employer, and not on the laborer. His general idea of favoring production and trade may be seen also from the close of his exposition, where he expresses the hope that it may be said of England, as formerly of Tyre, "that their Merchants are Princes and their Traffickers the Honourable of the Earth."³

Decker's project was greeted by a number of enthusiastic followers. Most of these preferred the single tax on houses to the general excise on the ground that the former would bear less heavily on the producer and the trader, since lower taxes on necessities would mean lower rates of wages. Thus, the author of an anonymous tract, in speaking of a new plan to be "substituted in the room of our present preposterous

¹ *Ibid.*, p. 23.

² "And the Goods," he adds, "which are the Produce of their Labour, might, by this Means, be sold at as low, or even a lower Rate than can be afforded by other Nations."—*Ibid.*, p. 16.

³ *Ibid.*, p. 32.

Method of Taxing," said that "a more advantageous Scheme, not altogether unlike that of Sir Matthew Decker's might be proposed, which would exempt the Laborious from every Tax; by which the landed Interest and all the useful Members of the Community would be considerable Gainers."¹ So also Postlethwayt held that an artificial rise of wages through taxes was injurious to the laborer as well as to the whole community, and put the query "Whether the Encrease of Taxes in our State do not all somehow ultimately terminate upon our Trade and Commerce."² To avoid this result he favored "One moderate and equal Tax upon Houses," or, as he puts it in another place, "some one general tax, either upon houses or otherwise."³ Postlethwayt, it will be seen, was not quite sure in his mind as to the advisability of a single tax on houses; later he even suggested as an alternative the single tax on luxuries.⁴ Another writer, Fauquier, with whose vigorous opposition to the excise we have already become acquainted, also approved Decker's scheme. His argument was simple. "Since the Consumer pays the whole of the Tax, it must be equal to him, when he maturely weighs it, how or on what it is laid. All that really concerns him, is that he should pay as little as the Exigencies of the State will admit of; and that the whole of what he does pay should, if possible, go clear of all Deductions into the Exchequer, to answer the Purposes for which it was levied."⁵

¹ *The Case of the Five Millions fairly stated in regard to Taxes, Trade, Law, Lawyers, etc. Addressed to the Guardians of our Liberty.* London, 1758, p. 17.

² *Great Britains True System wherein is clearly shewn, That an Increase of the Public Debt and Taxes must, in a few Years, prove the Ruin of the Monied, the Trading and the Landed Interests etc. Humbly submitted to the Consideration of all the Great Men, In and Out of Power.* By Malachy Postlethwayt, Esq. London, 1757, p. 132.

³ *Ibid.*, pp. 130, 134.

⁴ "A free tax, bearing solely upon the different articles of Luxury and Consumption (those of absolute Necessity excepted)." — *Ibid.*, p. 319. See above, p. 59.

⁵ *An Essay on Ways and Means, etc.* By F. F. London, 1756, p. 22. For the full title of the work, see above, p. 17, note 7. Fauquier really approved of

A few writers accepted the principle of this scheme, while desiring to modify it by substituting windows for houses. The earliest advocate of this single tax on windows, Horsley, advanced his scheme immediately after Decker had published his plan.¹ Horsley, it appears, cared more for the "singleness" of the tax than for anything else. "It seems to me no otherwise material," he tells us, "what you lay the Duty on, so it be a single Duty."² The same idea of "consolidating every imposition whatever," in order to "fix it altogether on windows," was advanced by another writer³ a few decades later, when all single tax ideas had about gone out of fashion.

Decker's project for a single tax on houses soon met with determined opponents. Of these, the most prominent was Massie. In his earlier work, written to controvert the plan as set forth by Fauquier,⁴ Massie disclosed only a moderate opposition.⁵ But in the following year he turned his batteries in full force against Decker himself.⁶ He specifies all kinds of objections upon which it is not necessary here to dilate, farther than to state that he condemns the single tax

Decker's scheme, only with some modifications. See *An Essay*, p. 26. He even suggested a capitation tax as an alternative. — *Ibid.*, p. 32; and more decidedly in the postscript to the second edition, published the same year.

¹ *Serious Considerations on the High Duties examin'd: address'd to Sir Matthew Decker.* By Mr. Horsley. London, 1744.

² *Ibid.*, p. 32.

³ *Considerations on the National Debt and nett Produce of the Revenue: with a Plan for consolidating into one Rate the Land and all other Taxes, by which More Money will be raised; Individuals not pay half the present Taxes; Smuggling altogether prevented; . . . the poor exempted from every Contribution, etc.* By a Merchant of London. London, 1784. See esp. p. 31.

⁴ *Observations upon Mr. Fauquier's Essay on Ways and Means for raising Money to support the present War without increasing the Public Debts, etc.* By J. M. [Joseph Massie]. London, 1756.

⁵ He objects more to the amount to be raised, than to the manner of raising it.

⁶ *The Proposal, commonly called Sir Matthew Decker's Scheme for one General Tax upon Houses, laid open; and shewed to be a deep concerted Project to traduce the Wisdom of the Legislature; disquiet the Minds of the People; and ruin the Trade and Manufacturies of Great Britain.* [By Joseph Massie.] London, 1757.

on houses as really "a Proposal to raise all the Public Supplies by one General Tax upon the Commodities and Manufactures of Great Britain." So far as the incidence of the tax is concerned, he believes that it will be shifted to the consumer; for, "whatever Money a Farmer, a Tradesman, or a Merchant pays for Taxes is, and must be repaid him in the Prices of the Commodities he deals in."¹ He favors the existing land tax because it finally falls on the landowner.² In respect to the incidence of the other taxes, he seems to revert to the old theory that "the Taxes of this Kingdom are so wisely laid, as to encourage Industry and good Husbandry, by discouraging their Opposites."³ Somewhat later Arthur Young also opposed Decker's scheme and the theory of incidence on which it was based. Taxes on houses, he thinks,

¹ *The Proposal*, p. 114. He adds in another passage: "They are, in reality, Factors between the Landholders and Consumers of Commodities; and every Man knows, that a Factor must be paid Commission for the Goods he sells, over and above all Taxes and other Charges." — *Ibid.*, p. 116.

² "The Land-Owners cannot sell or lett their Lands for more Money, because they pay this Tax out of their Rents; for a Buyer of Land considers what Money it will bring for his own use; and a Farmer of Land must consider what Prices his Corn, Cattle, Wool, Butter, Cheese, etc., will fetch at Market. . . . And as the Prices of these Commodities are, and necessarily must be governed by the Money that People in general can afford to pay for them (Years of Scarcity excepted), the Land-Tax must fall upon the Land-Owners." — *Ibid.*, p. 38. Cf. also p. 104.

³ *Ibid.*, p. 68. That Massie set his face sternly against any further increase of taxation is shown by two interesting pamphlets, in which he has not a little to say about the question of incidence. See *Reasons humbly offered against laying any further British Duties on Wrought Silks of the Manufacture of Italy, the Kingdom of Naples and Sicily, or Holland: shewing the probable Ill Consequences of such a Measure in regard to the Landed Interest, Woollen Manufacturies, Silk Manufacturies, Fisheries, Wealth and Naval Power of Great Britain*. London, 1758. This contains a bibliography of Massie's writings up to that date. Cf. also his *Observations on the new Cyder-Tax, so far as the same may affect our Woollen Manufacturies, Newfoundland Fisheries, etc.* London, 1764. For Massie's attitude on the question of the shifting of taxes to the poor, see above, p. 44. In his two other important tracts on taxation, Massie rather neglects the subject of incidence. See his *Calculations of Taxes for a Family of Each Rank, Degree, or Class for one Year*. 1756. A reply to this was made by Bouchier Cleeve, and a rejoinder by Massie in *A Letter to Bouchier Cleeve, Esq., concerning his Calculations of Taxes*. 1757

force a man to pay not because he *consumes*, but because he *possesses*; the one [the excise or the tax on consumption] is a proof he is able to pay, the other [the tax on houses] no proof of it at all.¹ This is the last reference to the scheme, for with the introduction, shortly after, of the tax on inhabited houses by Lord North the agitation for a single tax of this kind came to an end.

¹ *Political Arithmetic*. By Arthur Young. London, 1774, chap. iii, sec. i, esp. p. 214. During the revolutionary era in France a similar scheme for a single tax on houses was again advanced as an entirely novel idea. See *Plan de Révolution concernant les Finances, ou Découverte Consolante de l'Impôt Unique du Toisé*. Par M. Blanc-Gilli, de Marseille. Paris, 1790. See esp. the *Supplément à la Découverte de l'Impôt du Toisé*, pp. 78 *et seq.*

CHAPTER IV

THOSE WHO FAVOR A GENERAL PROPERTY TAX

By the close of the seventeenth century the old general property tax in England had become in fact what it soon became in name — a land tax.¹ There was not lacking then, as now, a group of writers who believed that the panacea for existing evils was to be found in the reimposition of a tax on the various kinds of personal property, and especially of intangible personalty. This belief most commonly took form in demands for a tax on moneys at interest, supplemented a little later by calls for a tax on the evidences of debt or on funds in general. All these demands were based on the theory that a tax on loans would fall on the lender.

The earliest formulation of such a demand is found in a work of the younger Culpeper.² Taxes on land, says he, fall on the landowner, while taxes on trade and luxury rest there and leave the usurer free.³ Taxes on moneys at interest, however, would not only diminish the curse of usury, but since they fall on the lender, they would raise the value of land, which now bears far more than its proportion of taxes.⁴

¹ See Seligman, *Essays in Taxation*, 2d ed., 1897, pp. 45-48.

² *The Necessity of Abating Usury re-asserted; in a Reply to the Discourse of Mr. Thomas Manley entituled, Usury at Six per Cent. examined, etc., together with a Familiar and inoffensive way propounded for the future Discovery of summes at Interest, that they may be charged with their equal shares of Publick Taxes and Burthens*, etc. By Sir Thomas Culpeper, Jun., Knight. London, 1670. For Manley's treatise, and his views on the question, see above, p. 31. For an earlier work of Culpeper, and his views, see above, p. 13.

³ *Ibid.*, pp. 5-7.

⁴ "I cannot but with trouble reflect, that Land and Trade should so conspire to play the Usurers game against themselves, as by their discord all along they have

Another writer, who entered more thoroughly into the difficulties connected with the problem of incidence, was not blind to the fact that in the ordinary course of events, a tax on interest tends to be shifted to the borrower. He believed, however, that this might be prevented by an act of Parliament, and that the tax might be enforced through a compulsory registration of all debts and mortgages.¹ In the same way, Davenant, who thought that "there is nothing too hard for the wisdom of a parliament to bring about," proposed a tax on "the usurers, who are the true drones of a commonwealth, living upon the honey without any labour."² This was, however, only a passing fancy of Davenant, whose fundamental theory of incidence was somewhat different.³

Other writers wished to include not only moneys at interest, but all kinds of personalty, to form a general property tax. Thus, one author, who objected to the "sole Land-Taxes,"⁴ demanded that "Sums at Interest with all other Liquid Revenues shall pay the Quota in a due proportion with our Land-Rents." This "due proportion," as he soon attempts

done; The trader crying, tax Land, in Gods name, for that will bear it, trade cannot; And the Land-lord of late, spare Land, for Gods sake, it hath already been taxed to death; Taxe now our superfluous trade, and therein our luxury; Giving, it seems, the Usurer over to his Reprobate sense, and therefore freely permitting him to thrive in this World; But little, in the mean time, considering, that tillage and traffick lay in one belly the Earth, sayle in one bottom upon the Sea, and fear one Pyrate or vermine, the Usurer." — *Ibid.*, p. 15.

¹ *A Plain and Easie Way for the Speedy Raising of Money to supply their Majesties Present Occasions: which will also, very much tend to the Advancing the Value of Lands.* By a Divine of the Church of England. London, 1691. Cf. esp. pp. 12, 30, 31.

² These, he thinks, "should, of all people, be brought in to bear their proportion of the common burden." "As yet," he adds, "they could never be effectually reached but they may be fetched in by the wisdom of a parliament, if the house of commons would please resolutely to set themselves about it." — *An Essay upon Ways and Means of supplying the War.* [By Charles Davenant.] London, 1695. Reprinted in *Collected Works of Davenant*, edited by Whitworth. London, 1771. Cf. vol. i, p. 57 of the reprint.

³ See below, p. 73.

⁴ *A Letter from a Gentleman to his Friend, by way of Answer to one from Him, shewing the Present Expedient and Easiness of Equal Taxing.* [By R. S.] London, n.d. [about 1692], p. 10.

to prove, is a considerably higher rate than that levied on land.¹ Two other writers of about the same date, whose views on the excise have already been mentioned,² were also heartily in favor of this scheme. The one thought that a tax on personalty joined to the tax on lands would form "a mixed and comprehensive Quota, or Tax upon all Abilities";³ the other simply desired the reimposition of the "Subsidy or Pound Rate as the Ancient Methods of our Ancestors."⁴ De Foe also, at the end of the century, objected not only to the taxes on the poor,⁵ but to the inequality of the land tax,⁶ which he thought might be remedied by assessing every one according to his stock of property.⁷

A few years later the same scheme was propounded in a work written to advocate the taxation of annuities and of shares in the East India Company and in the Bank of England, as well as of moneys at interest.⁸ The author's ideal was a "just and equal Tax, obliging all Ranks and Degrees of

¹ He demands that "all the Liquid-Rents be charged to pay either the double, or at least one Third part more than the Land-Rents, which are so sensibly liable to grievous endless Repairs, with abundance of other Charges, vast trouble oft-times in Managing, and by daily sad Experience, severe Casualties and Losses."—*A Letter from a Gentleman to his Friend*, p. 11.

² Above, pp. 22 and 47.

³ *A Letter from a Gentleman in the Country to his Friend in the City: touching Sir William Petty's Posthumous Treatise entitled Verbum Sapienti*. London, 1691, p. 15.

⁴ *An Essay upon Taxes calculated for the Present Juncture of affairs in England*. London, 1693, pp. 20-24.

⁵ "In a General Tax, if any shou'd be excus'd, it shou'd be the Poor, who are not able to pay, or at least are pinch'd in the necessary parts of Life by paying."—*An Essay upon Projects*. [By Daniel De Foe.] London, 1697, p. vii.

⁶ "And not to run on in Particulars, I affirm, That in the Land-Tax Ten certain Gentlemen in London put together, did not pay for half so much Personal Estate, call'd Stock, as the poorest of them is reputed really to possess."—*Ibid.*, p. xi.

⁷ "If I were to be ask'd how I wou'd remedy this? I wou'd answer, It shou'd be by some Method in which every man may be tax'd in the due proportion to his Estate, and the Act put in execution, according to the true Intent and Meaning of it; in order to which a Commission of Assessment shou'd be granted to Twelve Men."—*Ibid.*, p. viii.

⁸ *An Essay concerning the Necessity of Equal Taxes; and the Dangerous Consequences of the Encouragement given to Usury among us of late Years. With some*

men to pay to the support of the Government in proportion to their share in the Publick, and the benefits they reap from it.”¹ This ideal, he thought, could be reached “by taking of Money, according to its product in Interest, as it were so much a year in Land.”²

The time for such projects, however, had already passed, although the proposition was occasionally revived. Wagstaffe, for instance, at the beginning of the eighteenth century, painted in glowing colors the defects of the existing system.³ “If a General Excise, and any other Provision for an equal Tax may be feasible,” he added, “no Man shall more readily embrace it than myself.” In default of any such scheme, however, he outlined his plan for a tax on personal property, and engaged “to shew that it will be so far from being Prejudicial to the Trade of the Nation, that ’tis the only way to Encourage and Support it.”⁴ In the fifth⁵ and sixth⁶ dec-

Proposals to promote the Former and give a Check to the Latter. By the author of *The History of the Last Parliament*. London, 1702. This was probably written by James Drake, M.D., although it is also ascribed to Sir Richard Blackmore (as in the Manchester Free Library catalogue).

¹ *Ibid.*, p. 5.

² *Ibid.*, p. 11. “Till such a Scheme for raising Money,” he says in another place, “may be contriv’d, as shall reduce Money and Land to a just proportion in the expences of the Nation, the Publick will always lean on the wrong side, and be in a tottering condition.” — *Ibid.*, p. 3.

³ *The State and Condition of our Taxes considered; or, a Proposal for a Tax upon Funds: shewing the Justice, Usefulness, and Necessity of such a Tax, in respect to our Trading and Landed Interest, and especially if we engage in a new War*, etc. By a Freeholder [William Wagstaffe]. London, 1714. A similar plan is found in *Fair Payment no Spunge*, etc. 1717. See above, p. 27.

⁴ *The State and Condition of our Taxes*, p. 16.

⁵ *Pro Commodo Regis et Populi. Publick Funds for Publick Service, by raising Three Millions of Money, or a Million and a Half, with Ease and Ability, without Charge of Collecting, or affecting Land or Trade, or burdening Tax upon Tax.* In an Appeal to the Impartial and Common Understanding of all Mankind. London, 1744. The author bases his claim on the following argument: “The Land is the Wealth of the Country, has it’s natural, and artificial Product, The one the Fruits of the Earth, the other the Manufactures and Labour of it; But if it is solely loaded with constant heavy Taxes, it’s Possessors generally will be poor.” — p. 19. Cf. p. 17.

⁶ *Thoughts on the pernicious Consequences of borrowing Money.* London. 1759.

ades of the eighteenth century we again meet with allusions to the scheme. But the current of opinion, as well as the actual practice of the day, was so strongly against the scheme of a tax on personal property that very few writers took the trouble formally to refute the reasoning on which it was based. One or two, indeed, attempted to show that the reduction in the rate of interest on the funds was in effect a tax on funds.¹ But such an obviously weak argument was not necessary. Little more was heard of the plan.

¹ "A Reduction of Interest is to all Intents and Purposes a Tax." — *A Serious Address to the Proprietors of the Publick Funds, occasion'd by several late Schemes for Reducing their Interest or Subjecting them to Taxes: in which the Rights of Publick Creditors are explained and asserted, their just claim . . . to an exemption from Taxes fully demonstrated*, etc. Humbly submitted to the Consideration of the Members of the House of Commons. London, 1744, p. 41. "Those who say that Land and Trade have borne all the Burthen," adds the author, "& that such as have lent their Money to the Publick have paid nothing, really beg the Question, and take that for granted which it is not in their Power to prove, nay the very reverse of which is true." — *Ibid.*, pp. 36, 37.

CHAPTER V

THOSE WHO FAVOR A SINGLE TAX ON LAND

THE theory that all taxes are finally shifted to the landowner is commonly ascribed to the Physiocrats. Yet the same theory was expounded in England long before their time. The first inkling of the doctrine is found in a celebrated seventeenth-century tract, in which the author contends that the landowners "bear all the Taxes and publick burthens; which in truth are onely born by those who buy and sell not; all sellers raising the price of their commodities, or abating of their goodness, according to their Taxes."¹

This theory of incidence was, however, worked out much more fully by John Locke. He lays down his general thesis in the words: "Taxes, however contrived, and out of whose Hand soever immediately taken, do, in a Country, where the great Fund is in Land, for the most part terminate upon Land."² To prove this, Locke first attempts to show that a tax levied on the landowner cannot be shifted. If the "country gentleman" actually pays the tax out of his own

¹ *Reasons for a Limited Exportation of Wooll.* 1677, p. 5. The author also states that the landowners "are Masters and Proprietaries of the foundation of all the wealth in this Nation, all profit arising out of the Ground, which is theirs." Therefore it is much more to the interest of the nation to "preserve the Nobility, Gentry, and those to whom the Land of this Country belongs than a few Artificers employed in working the Superfluity of our Wooll or the Merchants who gain by the exportation of our Manufacture." This tract was written as a reply to *England's Interest by Trade asserted, shewing the Necessity and Excellency thereof*, etc. By W. C. (William Carter), a Servant to his King and Country. London, 1671. It was in turn answered by Carter in *A Reply to a Paper Intituled Reasons for a Limited Exportation of Wooll, or Objections against England's Interest.* London, 1689.

² *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money.* In a Letter to a Member of Parliament. [By

pocket, says Locke, he certainly feels the burden. But "this influences not at all the yearly Rent of the Land, which the Rack-renter or under Tenant pays; it being the same thing to him, whether he pays all his Rent to the King or his Landlord." For the "Tenant's Bargain and Profit is the same, whether the Land be charg'd, or not charg'd with an Annuity payable to another Man." The landowner, in other words, cannot shift a land tax.¹

But how is it, if taxes are levied not on land but on commodities? A tax on commodities, says Locke, must raise the price of the commodities to the consumer. "Let us see now who at long run must pay this and where it will light." "'Tis plain, the Merchant and Brokre, neither will nor can; for if he pays more for Commodities than he did, he will sell them at a Price proportionably raised." On the other hand, the "poor Labourer and Handicraftsman cannot; for he just lives from hand to mouth already." The consequence of a tax on the laborer will be either that "his Wages must rise with the Price of things, to make him live, or else, not being able to maintain himself and Family by his Labour, he comes to the Parish; and then the Land bears the Burthen a heavier way." But if the laborer's wages rise, the farmer who must pay "more for Wages as well as other things, whil'st he sells his Corn and Wool, either at the same rate, or lower, at the Market (since the Tax laid upon it makes People less forward to buy) must either have his Rent abated, or else break and run away in his Landlord's Debt, and . . . so the yearly Value of the Land is brought down, and who then pays the Tax at the years end but the Landlord?"²

A tax on commodities imported, he continues, will always be shifted from the merchant to the consumer. In fact, the importer will generally expect a profit and "raise his price

John Locke.] London, 1692, p. 87. The date of this work is generally given as 1691. But although the epistle dedicatory bears the date of Nov. 7, 1691, the book itself has the imprint 1692. The passage quoted in the text may also be found reprinted in the *Collected Works of John Locke*, 12th edition, 1824, vol. iv, p. 55.

¹ *Some Considerations*, pp. 88, 89.

² *Ibid.*, p. 91.

above what his Tax comes to." For "you must not think that the raising their Price will lessen the vent of fashionable, Foreign Commodities amongst you."¹ With the produce of land it is different. "Your Landlord being forced to bring his Commodities to Market, such as his Land and Industry afford him, common and known things, must sell them there at such price as he can get." When a tax is laid on these "homebred Commodities," which are seldom "the Favourites of your people, every one makes as sparing a use of them as he can;" prices will fall and rents will decrease.

Hence Locke concludes in the famous passage: "It is in vain, in a Country whose great Fund is Land, to hope to lay the publick charge of the Government on anything else, there at last it will terminate. The Merchant (do what you can) will not bear it: the Labourer cannot, and therefore the Landowner must; and whether he were best to do it, by laying it directly where it will last settle, or by letting it come to him by the sinking of his Rents, which when they are once fallen, every one knows are not easily raised again, let him consider."²

Locke's theory was soon accepted by a number of writers. One of the earliest was the renowned financier Davenant. But while Davenant accepts Locke's theory of incidence, he does not draw the conclusion that it is advisable to levy a single tax on land. For instance, he intimates in one place that it may be wise to supplement the land tax by a "tax on money."³ He is also quite a partisan of the excise, and asks "Can any tax be more reasonable?" He thinks, however, that "the proper commodities to lay excises upon are those which serve merely to luxury, because that way the poor would be least affected."⁴ Even here, however, he believes

¹ *Some Considerations*, pp. 92, 93.

² *Ibid.*, p. 95, 96. This is the first instance in English literature of any allusion to the term "direct taxes."

³ See above, p. 67.

⁴ *An Essay upon Ways and Means of supplying the War*. [By Charles Davenant.] London, 1695. In the *Collected Works* of Davenant, edited by Whitworth, London, 1771, vol. i, pp. 65, 66.

that excises also fall ultimately on land, even if with somewhat less crushing force than a direct land tax.¹ Davenant, in fact, holds that the farther off taxes are laid from the producer, the smaller will be their tendency to rest on the land.² But this tendency, he admits, cannot be entirely arrested; and he does not shrink from stating that "all taxes whatsoever are in their last resort a charge upon land."³ So also Asgill⁴ and Cantil-

¹ "Though excises will affect land in no degree like taxes that charge it directly, yet excises will always lie so heavily upon the landed man, as to make them concerned in parliament, to continue such duties no longer than the necessity of the war continues." — *An Essay upon Ways and Means*, p. 77.

² "All excises should be laid as remotely from land as possible; it is true they yield less when so put, because the first maker is best come at; but when the last manufacturer or vender is charged, they lie with most equality upon the whole body of the people, and come not upon land in so direct a manner." — *Discourses on the Publick Revenues and of the Trade of England*. London, 1698. In *Collected Works*, i, p. 224.

In a later work, Davenant neglects this aspect of the excises, and emphasizes their injurious results to trade. "There is scarce any of these new Revenues, which do not give Trade some desperate Wound. The Additional Duties on Beer and Ale, and the Tax upon Malt are apparently a Burthen upon the Woollen Manufactures, affecting the Carder, Spinner, Weaver and the Dyer, who all of them must be rais'd in their Wages, when the Necessaries of Life are rais'd to them. The Consequences of which will be, That our Woollen Goods must come at a heavy and disadvantageous Price into the Foreign Markets." — *An Essay upon the Probable Means of making a People Gainers in the Ballance of Trade*. By the author of the *Essay upon Ways and Means*. London, 1699, p. 145. (Also in *Collected Works*.) Cf. pp. 146, 147, where he discusses the bad influence of the salt tax on "Manufactures and Navigation." Cf. also a passage much quoted at the time of Walpole's Excise scheme: "This may be generally said, That all Duties whatsoever, upon the Consumption of a large Produce, fall with the greatest Weight upon the Common Sort; so that such as think in new Duties that they chiefly tax the Rich, will find themselves quite mistaken; for either their Fund must yield little, or it must arise from the whole Body of the People, of which the richer Sort are but a small Proportion." This passage is quoted on the title-page of *The Nature of the Present Excise*. London, 1733, mentioned below, p. 81.

³ *An Essay upon Ways and Means*. In *Collected Works*, i, p. 77.

⁴ *Several Assertions Proved in order to Create another Species of Money than Gold or Silver*. By John Asgill. London, 1696, esp. p. 20. "Man deals in nothing but Earth; the Merchants are the Factors of the world to exchange one parte of the earth for another. The King himself is fed by the labour of the ox and the Cloathing of the army and the Victualing of the navy, must all be paid

lon¹ were worthy precursors of the Physiocrats, so far as they asserted that land was the real foundation of all wealth, and therefore ultimately bore the weight of all taxes.

In the early decades of the eighteenth century, Locke's theory is frequently encountered. Some authors, like Wood, were quite content simply to quote his views.² Others sought to add to Locke's argument. One writer, who accepts the general theory, boldly takes issue with the doctrine as expounded by Davenant, and maintains that the more indirect the tax, the worse it will be for the landowner.³ Another writer, whose pages are filled with quotations from Locke, does not deny that excises add to the price paid by the consumer, but thinks that the producer also pays the tax, at all events in part.⁴ He seeks to prove this by an inductive study of

for to the owner of the soil as the ultimate Receiver, and whatever the ultimate Receiver will demand or accept must be a rule for the intermediate Receivers to govern themselves by." Asgill was first quoted by Lauderdale in *An Inquiry into the Nature and Origin of Public Wealth*. London, 1804, p. 113.

¹ Cantillon, *Essai sur la Nature du Commerce en Général*, 1755. (Translation of the English work written before 1734 but not published.) See esp. chap. xii: "Tous les Ordres et tous les Hommes d'un Etat subsistent ou s'enrichissent aux dépens des Propriétaires des Terres."

² *A Letter to a Member of Parliament: shewing the Justice of a more equal and impartial Assessment on Land: the Sacredness of Publick Engagements: the Advantages of lowering the Customs and high Duties on Trade: And the Ease of reducing by Degrees the Debts of the Nation*. London, 1717, esp. pp. 7 and 28. If this pamphlet was not written by William Wood, he must be accused of plagiarism. For in a large work of the next year, which Wood wrote, we find whole pages on the subject of taxation, including extracts from Locke, copied word for word from the pamphlet, without mentioning it at all. Cf. *A Survey of Trade in Four Parts . . . together with Considerations on our Money and Bullion*. [By William Wood.] London, 1718, pp. 68-72, where pp. 5-8 of the pamphlet are copied bodily. Wood, however, does not go quite as far as to advocate the single tax on land. He simply objects to taking off any taxes on land.

³ "If Land Owners can and do prevent the Load of a Tax from falling directly and immediately on themselves, yet in the last Resort there it will fall, let them shift it seemingly as far off as they will in the first Imposition; and perhaps just so much farther off from them as it is laid in the first Instant, and according to common View and Estimation, just so much the more heavily it comes upon them at the last."—*An Essay on Leases and Annuities*. London, n.d. [circa 1730], p. 109.

⁴ "There is no Doubt but the last Retailer of excisable Goods makes an Addi-

the malt tax. The same result, he thinks, is clear from a scrutiny of the "duty on lights," which was intended as a tax on the tenant, and yet turned out to be a tax on the owner.¹ "In this Instance," says our author, "we see how readily and quickly the Tax centers in the Landlord; from whence one would suspect that this is the Case in most of the excisable Goods."² "The many windings and turnings in Trade," he concludes, "may make it longer e'er the Tax reaches the Landholder, and may prevent our discovering how it takes its Course, yet there it must and does come at last."³

At the time of Walpole's excise scheme, it was but natural that this view should again be emphasized. One of the disputants sought to crush his adversary by stating that "it hath been fully proved by unanswerable Authority that all Taxes, in this Kingdom, must ultimately affect Land."⁴ But after Locke, the theory was most fully explained at about the same time, although independently of the excise controversy, by Vanderlint, with whose views on the subject of the workingman we have already become acquainted.⁵

Vanderlint contends that if all the existing taxes were suddenly to be abolished and to be replaced by a tax on real estate, the benefit would still inure to the landowner. His

tion to the Price of them, equal to the Tax laid upon them; and yet I am afraid that the first Producer pays it likewise, so that in the Event 'tis twice paid." — *Some Thoughts on the Interest of Money in General, and particularly in the Publick Funds, With Reasons for Fixing the same at a lower Rate, in both Instances, with Regard especially to Landholders.* London, n.d., p. 93. This work, as appears from internal evidence, was published between 1728 and 1739. The quotations are made from the second edition.

¹ "The Custom in some Places, I may say in some Countries, is to throw it on the Owners, and they discount it as regularly as they do the Land Tax." — *Ibid.*, p. 94.

² "Since the Pretext of the Duty," he adds, "is so good a Handle to beat down the Price of them in the Hands of the first Producer." — *Ibid.*, p. 95.

³ *Ibid.*, p. 95.

⁴ *A Review of the Excise-Scheme; in Answer to a Pamphlet, intitled The Rise and Fall of the late projected Excise, impartially considered.* [By Pulteney?] London, 1733, p. 22.

⁵ *Money answers all Things, etc.* By Jacob Vanderlint. London, 1734. For the full title, see above, p. 42.

argument is as follows: prices of commodities, when freed from taxation, either will remain the same or will fall. If they remain the same, — assuming also that there has been no change in the money supply, — the cost of production will decrease, because of the abolition of the tax on the producers. The difference between cost and price, however, is rent. Hence, the only result will be to increase the rent of the landowner.¹ On the other hand, if the prices fall, demand will increase. But, since all commodities, in last resort, come from the land, this increased demand means higher rent.² Thus, from either point of view, remission of taxes redounds to the welfare of the landlord. In other words, the incidence of all taxes is on the land. Vanderlint accordingly proposed a single tax on land, as at once far cheaper and far better than the existing complicated and inconvenient taxes, which after all, in his opinion, finally fall on land.

This view of the incidence of taxation occasionally appeared in subsequent decades. Thus, during the forties,³ one writer seeks to prove at some length that not only do "Taxes laid upon our Home consumption center chiefly in the Landowner," but "the same must be true of the, any other way,

¹ "Suppose the Cash, amongst the People in general, to be what it now is; and that all the Taxes were taken off Goods; it's evident, this would not, in the End, lower the Price of Goods to the Consumers; since that Price . . . depends on the Quantity of Money circulating amongst the People: But if the Duties were taken off Goods, they must cost as much less than they do now, as the Taxes now on them . . . now enhance them; therefore, I think, if the Taxes were taken off Goods and laid on Lands and Houses only, so much more Money must in this Case come to the Hands of the Farmers for the Produce of the Ground, as would enable them to pay as much larger Rents." — *Ibid.*, pp. 112, 113.

² "If the Taxes were taken off Goods, they would come Cheaper, and Cheapness would increase the Consumption, as Cheapness of everything always doth; and that Increase of the Consumption would increase the Demand for those Things. Now since everything is the Produce of the Ground, the Demand for the Produce would increase the Demand for Land, and that would necessarily raise the Rent, even till all the Money now paid for Taxes, together with all the Charge they are necessarily attended with, would come into the Landlords Pockets for Rent." — *Ibid.*, p. 114.

³ *The State of our Wool and Woollen Trade Review'd. Wherein some Objections to the Grasier's Advocate are consider'd*, etc. London, 1743, p. 47.

advanced Price of the Necessaries of Life." Another writer of the same date states: "It is now no longer a Question; all men are convinced, and see clearly, that all Taxes . . . do either immediately, mediately, or ultimately, fall upon the Land-Holder."¹ The doctrine was, however, presented to the English public for the last time, although in an alleged translation from the French, as late as the decade immediately preceding Adam Smith, in the following statement: "Since the time of that great metaphysical legislator, Locke, it is an acknowledged and adopted principle of all who reflect with any perspicuity, that the weight of every tax upon consumption, ultimately falls and sets heavy on the proprietors of the soil."²

¹ *The Axe (once more) laid to the Root of the Tree*, etc. London, 1743, p. 6. For the full title, as well as for some other views of the author, see above, p. 53.

² *A General View of England; Respecting its Policy, Trade, Commerce, Taxes, Debts, Produce of Land, Colonies, Manners, etc., etc. Argumentatively stated from the Year 1600, to 1762*; In a Letter to A. M. L. C. D. By M. V. D. M. Now translated from the French, first printed in 1762. London, 1766, p. 17. Cf. p. 200.

CHAPTER VI

THOSE WHO FAVOR A MORE ECLECTIC SYSTEM

For some time after Locke's theory of the single tax on land had been propounded, there was but little opposition either to the scheme or to the theory of incidence on which it was based. This was no doubt owing to the fact that the plan was never seriously considered by the political leaders. But when Walpole put forward his excise scheme, the problem of incidence became a burning question. Several writers not only denied the general theory of the shifting of all taxes to land, but maintained that the land tax itself did not rest on the land.

Walpole himself is supposed to have been the author of a tract in which the theory is advanced that a tax on land is shifted to the consumer. "The Land-tax," he says, "falls heavily upon the People, by heightning the Rents of Lands, and consequently of Bread and Drink, and other Food: So that what the Land pays, the People too pay."¹ Another writer who favors the excise thinks that "where the Land is not Taxed, doubtless the Charge of Pasturage, and the Price of Provisions, will be less in proportion."² He considers the reduction of the land tax desirable for other reasons also, because "even the Labourer will find it for his Benefit; since, according to that Money which the Landed Man can spare, the Labourer will be employed."³

¹ *Some General Considerations concerning the Alteration and Improvement of Publick Revenues.* [By Sir Robert Walpole.] London, 1733, p. 9.

² *A Letter to a Freeholder on the Late Reduction of the Land Tax to One Shilling in the Pound.* By a Member of the House of Commons. London, 1732, p. 21.

³ *Ibid.*, p. 39. The author favors a tax on salt for the following remarkable reason: "All Men use Salt in proportion to their Ability, but all Men do not hold

The fullest expression of this view is found in the work of an anonymous pamphleteer who addressed himself primarily to the question of incidence.¹ He opposes the taxation of land, and incidentally favors the excise scheme, because the land tax is, in his opinion, shifted to the consumer. The smaller the land tax, the lower will be the price of provisions. This means lower money wages for the workman, and this, again, will enable the employer to compete with foreigners.²

In another passage, the author states outright that "a Land-Tax, which affects all the common Necessaries of Life of our own Production, is an actual general Excise, in the strict Sense of the Words." He therefore favors a scheme like Walpole's, because "it is a particular Excise upon foreign Superfluities and Luxuries, with a View to take off a general Excise from the common Necessaries."³ Later on, again, the author tries to show in considerable detail how a tax on land will raise the price of all manufactured products, as well as of the produce of the soil. He concludes that "whatever Tax be laid upon Land, the Rents and Produce thereof will

Land: to Multitudes of the former, there are very few of the latter . . . Is it not then much more equal and righteous that we should tax every Man a little in proportion to his Ability, than that we should tax a very few Men in a great Degree, far beyond the Proportion of their Ability?" — *A Letter to a Freeholder*, pp. 28, 29. A somewhat similar defence of the salt duty is found in another tract entitled *A Vindication of the Conduct of the Ministry, in the Scheme of the Excise on Wine and Tobacco*, etc., etc. London, 1734. The author favors the salt tax: "first that Duty is payed universally over the whole Nation and that it costs but little to every one in particular." — *Ibid.*, p. 57.

¹ *Englishmen's Eyes open'd; or All made to SEE, who are not resolv'd to be BLIND: Being the Excise Controversy set in a new Light; completely discuss'd upon the just Principles of Reasoning, and brought to a fair and demonstrative Conclusion: between a Landholder and a Merchant.* London, 1733.

² "By easing the Land, the Price of all the common Necessaries and Conveniencies of Life become cheaper; . . . when a Land-Tax is taken off, Landlords may afford to ease their Tenants, and they of course will ease the Poor in the Price of the Production of their Lands. The Poor, when they can live cheaper, will work cheaper; and our Manufactures will consequently be exported cheaper." — *Ibid.*, p. 7.

³ "Far from having a Tendency," he continues, "to what the Judicious understand by a general Excise, no Step could possibly be taken more effectually to free us from a general Excise." — *Ibid.*, p. 15.

be in a continual Flux of Raising, till the Landlord finds his Gains to be as great after the Deduction of that Tax, as before it was imposed.”¹ He discusses at some length the argument of “Mr. Lock,” but thinks that “gentlemen have wrested the Sense of this great Author, and made him speak their Sentiments, not his own.”²

These writers, as we have seen, opposed the land tax, because, among other defects, it was shifted to the consumer. But others who held the same doctrine of incidence drew precisely the opposite conclusion, favoring the land tax and trying to make it popular with the farmers and with the land-owning legislators, just because it would not fall on them. Thus the author of an interesting tract³ thought that the landlords raised their rents by the amount of the land tax, but that the farmers did not suffer, because they simply added the tax to the price of their products, the weight of the tax thus resting at last on the consumer.⁴

The theory that the land tax is shifted to the consumer was, as we know, a favorite doctrine of Petty.⁵ It ran counter, however, not only to the popular understanding, but to the ideas of most of the writers that discussed the land tax, who opposed or favored it according to their views as to the desirability of taxing the landowner. Thus, in the seventeenth

¹ *Ibid.*, p. 54.

² By a very involved and curious process he comes to the conclusion that the “Reasoning of Mr. Lock, although he has been frequently cited as an Authority for laying the Burthen of the Revenue upon Land, exactly quadrates with the whole Chain of my Argument in Opposition to it.” — *Ibid.*, p. 57.

³ *The Nature of the Present Excise, and the Consequences of its farther Extension, examined*. In a Letter to a Member of Parliament. London, 1733. The author is noteworthy as being one of the first to propound the capitalization theory of the land tax. See below, pp. 137, 138.

⁴ “All the Gentlemen . . . have had frequent opportunities of re-setting their Lands, and have indemnified themselves by raising their Rents: What they have lost by the Tax, they have gain’d in their Rent-rolls. The Farmers themselves have not felt it much, because they have raised the Price of Provisions likewise in Proportion, as their Landlords have raised their Payments; so that the greatest Burthen has lain all along upon the Consumer, who in Nine Instances out of Ten, is a Labourer or Manufacturer.” — *Ibid.*, p. 38.

⁵ See above, p. 19.

century, one pamphleteer strongly upheld the land tax,¹ while Reynell as vigorously objected to it,² but neither imagined for a moment that the tax would not rest where it was imposed.

Again, at the time of the excise scheme most of those who favored the excise did so because they desired to relieve land from the burdens resting on it. As one of the writers put it: "A Tax imposed upon Land, is utterly unavoidable. Let a Freeholder be in narrow circumstances, let him have a large Family, let him be a frugal Man, or let his Case be what he will, he cannot help himself by any Abatement of this Charge upon his Income. Such an Estate is loaded with such a Burden, which no Management can lighten."³

With the greater diversity of taxation in the eighteenth century, the controversies over the incidence of taxation soon covered more ground than the land tax. With this widening

¹ "It is humbly offered and submitted, whether there can be any way in the World found, more certain, equal, and easie, to raise the same (Money), than by a Land-Tax: for then they will know what it is they give, when and how certainly it will come in, and the time when the same will end." — *The Grand Concern of England; explained in several Proposals offered to the Consideration of the Parliament*. By a Lover of his Countrey and Well-wisher to the Prosperity both of the King and Kingdoms. London, 1673, p. 3.

² "Taxes were better raised any way than from the Land, for that drains Money out of the Country which seldom or never returns . . . There might be waies found out, that no Taxes might ever be laid, on the substantial part of the Nation, Country, or City, Land, or Houses." — *The True English Interest, or an Account of the Chief Natural Improvements*. By Carew Reynell. London, 1674, chap. 25: "Kings Revenue, Taxes, Customs," pp. 68, 69. His scheme was to lay a tax "only on the vices of the People, as on all Taverns, Ale Houses, Foreign Needless Commodities and on debauched persons." To this he added a tax on bachelors, and high customs duties which he thought would be paid by the foreigner.

³ *A Letter to the Free-holders of Great Britain*. London, 1733, p. 27. "But Wine and Tobacco," he adds, "are things of quite another Kind . . . A Man may either live comfortably without them, or lessen his Expences in them, as he sees convenient." Cf. for similar views as to the land tax *A Letter from a Member of Parliament for a Borough in the West, to a Noble Lord in his Neighbourhood there, concerning the Excise-Bill and the Manner and Causes of Losing it*. London, 1733, p. 27. See also *The Rise and Fall of the late Projected Excise, impartially consider'd*. By a Friend to the English Constitution. London, 1733, pp. 13, 15, 27.

of the field, the opposition to Locke's theory of the single tax grew apace. Nugent, for example, the author of a widely read monograph, maintains that "Mr. Locke's position, taken in its full extent and without any limitations, is greatly controvertible," and "that the maxim seems to go farther than reason and experience will warrant."¹ He does not object to the statement that a tax laid upon farmers' produce "makes people less forward to buy"; but he does not see "why that reason should not have the same operation upon other commodities." The demand for commodities, he thinks, depends "on the quantity of money subsisting in the market"; and if this quantity is unchanged, an increased tax on the general trader must diminish mercantile profits.² The same argument which proves that a land tax cannot be shifted equally shows that a tax on traders' profits can likewise not be shifted. Nugent, however, makes one notable exception, maintaining that it is useless to try to tax "moneyed men" on their personal property. For, says he, taxes on mortgages or on the public funds would be shifted to the mortgagor or to the public, respectively, through a corresponding increase in the rate of interest.³ Finally, he objects to any further increase of the excise taxes, opposing the view that higher taxes will induce the poor to work.⁴ Therefore, while he is confessedly not an advocate of any single tax on land, he objects to a lowering of the land tax, which would involve a further increase in the taxes on trade and commodities.

¹ *Considerations upon a Reduction of the Land Tax*. [By Robert Nugent.] London, 1749, p. 9.

² "And if additional taxes be laid, while the money, with which commodities are to be purchased, remains unincreased, the traders must be contented with smaller gains, or not trade at all. And the first part of the alternative will always be the case, where the profits of a flourishing trade may well support some diminution." — *Ibid.*, p. 14.

³ "Were mortgages, or the funds, to be taxed, matters would not be mended. For, as taxes, wherever placed, can have no tendency to lower the interest of money; they, who buy into the funds, would buy so much cheaper as the tax would amount to, and the lender upon mortgages insist upon a higher rate of interest." — *Ibid.*, p. 25.

⁴ See above, p. 42.

In a later monograph Nugent returns to the charge and speaks of the absurdity of those who "contend for an Abatement of that Tax, preferable to all others, the cheapest levied, producing most, and the least felt, of any. And such, incontestably, is the Land-tax; which, bating the Word, affects that Interest, which opposes it strongest, less, than any other Tax in like Proportion of Quantity and neat Produce."¹

The general doubt as to the truth of Locke's theory is seen in a number of other works. Thus an anonymous writer of about the same period maintains that the existing taxes affect not only the landowner, but also the laborer and the trader.² In former times, he says, "when taxes were very moderate, because they were so, the necessities of Life were cheap; Labour was so. The consequence of which was, that we were enabled to work up our Manufactures so moderately cheap as to command most of the Markets of the World."³ A little later Postlethwayt refers to the opposition to Locke's theory, without attempting, however, to give his reasons.⁴ Another writer refers more specifically to Locke's doctrine that taxes on commodities are indirect taxes on land.⁵ This he thinks a mistake, not only because wages do not rise proportionately with taxes on labor, but also because trade is able to shift the burden of taxes to the consumer. It is

¹ *Further Considerations upon a Reduction of the Land-Tax: Together with a State of the Annual Supplies of the Sinking Fund, and of the National Debt, at various future Periods, and in various Suppositions.* [By Robert Nugent.] London, 1751, pp. 90, 91.

² *Britannia in Mourning: or a Review of the Politicks and conduct of the Court of Great Britain with Regard to France, the Ballance of Power, and the True Interest of these Nations . . . and likewise a View of the present State of our Liberties and Trade, compared with what they have been, etc.* In a Dialogue between two ancient Patriot Englishmen, commonly known by the names of, Jest and Earnest. London, 1742.

³ *Ibid.*, pp. 13, 14.

⁴ "If Mr. Locke's Observation, that all Taxes in general ultimately terminating upon landed (*sic*) should be exceptionable, as some think it, yet," *etc.*—*Great Britain's True System*, *etc.* By Malachy Postlethwayt. London, 1757, p. 306.

⁵ *Considerations on the Policy, Commerce and Circumstances of the Kingdom.* London, 1771, chap. viii: "On Taxes," p. 60.

the workman, not the landowner, upon whom the weight finally rests.¹

The most famous opponents of the single tax on land, however, were the two chief economists of the third quarter of the eighteenth century, Hume and Steuart. Hume attacks Locke's doctrine on the ground that every one tries to shift the tax to some one else; and that there is no reason to suppose that the landowners are weaker in this respect than other classes of society. "Every man, to be sure," says Hume, "is desirous of pushing off from himself the burthen of any tax, which is impos'd, and laying it upon others: But as every man has the same inclination, and is upon the defensive; no set of men can be suppos'd to prevail altogether in this contest. And why the landed gentlemen shou'd be the victim of the whole, and shou'd not be able to defend himself, as well as others are, I cannot readily imagine."² Hume thinks that the principle "tho' first advanc'd by a celebrated writer, has so little appearance of reason, that were it not for his authority, it had never been receiv'd by anybody."

In another celebrated passage, Hume discusses the maxim of the "ways and means men," which he accepts in part "that every new tax creates a new ability in the subject to bear it." He points out that the consequences of laying a tax

¹ "Mr. Locke was of opinion, that taxes upon commodities affect the landed interest more than if laid directly upon land; which would be a good deal the case, if the prices of labour were raised proportionally to the increase of taxes; but that has not been done in this country. There is indeed no taxing of traders in the articles of their traffic, because they are, and ever will be, the raters of the values of their own commodities: so that experience shews, for a small tax laid on any thing they deal in, they will make a large consideration in price. Thus those whose single commodity is labour; are taxed by government, directly for their windows, for statute-work and most commodities they consume, and they are indirectly taxed by land-owners in the increase of farm-rents, because the farmer raises proportionally the prices of his commodities; while other dealers add to the taxes that are laid on the commodities they sell, another to themselves in the prices which they exact; without workmen having any advance in their own wages that is equivalent." — *Ibid.*, pp. 60–62.

² *Political Discourses*. By David Hume, Esq. Edinburgh, 1752. Chap. viii: "Of Taxes," p. 121. The quotations are from the second edition, published in the same year.

on commodities consumed by the common people are ordinarily supposed to be a diminution of wages so that the laborer bears the burden himself, or an increase of wages whereby the burden is shifted to the employer. "But," he adds, "there is a third consequence, which very often follows upon taxes, *viz.*, that the poor encrease their industry, perform more work, and live as well as before, without demanding more for their labour."¹

Hume here seems to share the opinion already discussed,² that taxes act as a spur to industry. But if his reasoning be attentively considered, it will be seen that he is not willing to push the theory very far. For in the first place, he limits the doctrine to taxes other than those imposed upon necessities of life; and, secondly, even as to these he is doubtful. "This doctrine," he tells us, "may be admitted in some degree: But beware of the abuse. Exorbitant taxes, like extreme necessity, destroy industry, by engendring despair; and even before they reach this pitch, they raise the wages of the labourer and manufacturer and heighten the price of all commodities. An attentive, disinterested legislature will observe the point, where the emolument ceases, and the prejudice begins."³

The fullest discussion of the incidence of taxation before

¹ "Where taxes are moderate," he goes on to say, "and affect not the necessities of life, this consequence naturally follows; and 'tis certain that such difficulties often serve to excite the industry of a people, and render them more opulent and laborious than others, who enjoy the greatest advantages." — *Political Discourses*, p. 115.

² Above, pp. 32-39.

³ *Ibid.*, p. 118. Bastable, *Public Finance*, book iii, chap. ii, § 3 (2d ed., p. 270), scarcely does Hume justice in seeming to ascribe to him the doctrine in its extreme form. — Somewhat analogous to the doctrine that taxes on production are a spur to industry, is the theory that taxes on consumption increase the quantity of commodities consumed. We find this theory, not indeed in its extreme statement, but in a modified form, formulated by Arthur Young as follows: "Render any thing by taxes something more of a distinction than formerly, and you will find that the tax, instead of checking, will increase the consumption." — *Political Arithmetic*, 1774, p. 217. The same observation is found in the anonymous pamphlet *Inquiry into the Connection between the Size of Farms and the present Price of Provisions*. London, 1773.

Adam Smith is to be found in the works of Sir James Steuart.¹ He divides all taxes into three kinds, — proportional, cumulative and personal. Proportional taxes are those that fall upon expense (what we should call indirect taxes); cumulative or arbitrary taxes are those that affect property; and personal taxes are those that consist of personal services.² Proportional taxes, he says, are always “drawn back” (that is, shifted) by the industrious consumer. Steuart thinks a consumer “industrious” in all cases, except when the “consumption made by the latter is an article of superfluity.” In other words, taxes on the necessities of life are shifted from wage-earner to employer because the wage-earner is a “physical necessarian” who accumulates no profits;³ but if the laborer spends his money on taxable articles which other members of his class do not use, he cannot shift the tax.

Steuart illustrates this point as follows: “A tanner sells his leather to a shoemaker; the shoemaker, in paying the tanner for his leather, pays the tanner’s subsistence and profit, and the tax upon leather. The man who buys the shoes for his own consumption, refunds all this to the shoemaker, together with his subsistence, profit, and the tax upon shoes; consequently, the price of shoes are (*sic*) raised, only by refunding the taxes paid by the industrious. But if the shoemaker’s subsistence shall happen to include either tavern expences, or his consumption on idle days, he will not draw these back; because other shoemakers who do not frequent the tavern, and who are not idle, will undersell him.” All proportional

¹ *An Inquiry into the Principles of Political Economy: being an Essay on the Science of Domestic Policy in Free Nations.* By Sir James Steuart, Bart. London, 1767, book v, chaps. iii–vi, “Of Taxes, and of the proper application of their amount.” In the edition of his *Collected Works*, published in six volumes in 1805, the subject is contained in vol. iv. The quotations here are from the original quarto edition, vol. ii.

² “A proportional tax is that which is levied upon the idle consumer, at the time he buys the commodity.” “A cumulative tax, is the accumulation of that return which every individual, who enjoys any superfluity, owes daily to the state, for the advantages he receives by living in the society.” — *Ibid.*, ii, p. 500.

³ *Ibid.*, ii, p. 491.

taxes, therefore, fall at last upon "the rich and idle consumer of the manufacture, who can draw nothing back from anybody. . . . The whole reimbursement of all former payments and repayments lands upon him." Hence Steuart concludes, "How absurd therefore, is it either to say that all taxes fall ultimately upon land; or as others, for no better reason, pretend, that they fall upon trade." "Proportional taxes never can fall either upon, or affect any person but the idle; that is to say the not industrious consumer."¹

With regard to what he calls cumulative taxes, Steuart lays down the general rule that "the nature of all these taxes, is, to affect the possessions, income and profits of every individual, without putting it in their power to draw them back in any way whatever; consequently, such taxes tend very little towards enhancing the price of commodities."² These taxes ought, therefore, in his opinion, generally to be discountenanced. Taxes on land, he thinks, do not augment the price of wheat as similar taxes on commodities raise the price of excisable goods; for, if the proprietor were to attempt to raise the price of his grain in proportion to the tax, his farmer who pays no land tax would undersell him.³ All attempts to levy a tax on money, however, he regards as certain to fail. A tax on trade profits, again, although it tends to rest on profits, is not to be recommended, because, "although they appear to be income, I rather consider them as stock, which ought not to be taxed."⁴ Steuart's final conclusion is expressed in these words: "I conclude that no objection can lie against proportional taxes, so far as they affect the industrious; because they draw them compleatly back: and that great objections lie against cumulative taxes, when they affect the industrious, because they cannot draw them back; and consequently, they may affect the physical-necessary of the contributor, in case no profit should remain to him upon his labour. On the other hand, I think little objection can be made to cumulative taxes, when they are

¹ *An Inquiry into the Principles, etc.*, ii, p. 494. Cf. ii, p. 510.

² *Ibid.*, ii, p. 496.

³ *Ibid.*, ii, p. 552.

⁴ *Ibid.*, ii, p. 541.

imposed upon possessions, which produce a visible annual revenue, clear to the proprietors.”¹

It is clear, therefore, that by the third quarter of the eighteenth century the economists, although differing among themselves, were united in opposing Locke’s theory of the shifting of all taxes to land. It is no wonder that Dugald Stewart wrote, a few decades later, in reference to the plan of the single tax on land: “I shall only remark, that the first idea of it was borrowed from this country, where it has been repeatedly suggested by authors of reputation, although it had been almost forgotten as an exploded chimera, when it was revived by the Economists of France.”² And Arthur Young wrote: “I know not whether Mr. Locke were the original father of the doctrine, that all taxes, laid in any manner whatsoever, fall ultimately on land; but whoever started or supported it, contributed towards the establishment of one of the most dangerous absurdities that ever disgraced common sense.”³

We have now completed our examination of the early literature on taxation. We have limited ourselves to England for two reasons: first, because most of the fiscal writings, as well as those on economics in general, are to be found in England; and, secondly, because the scantier literature of the continent is very much better known. The continental literature, however, so far as it discussed the incidence of taxation at all, confined itself chiefly to generalities on the question of direct *versus* indirect taxation, and more specifi-

¹ *Ibid.*, ii, p. 519.

² *Lectures on Political Economy* [delivered in 1800-1801]. *Now first published.* By Dugald Stewart. Edited by Sir William Hamilton. Edinburgh, 1877, ii, p. 238.

³ *Travels in France.* By Arthur Young. London, 1794, i, p. 590. Young adds, in reference to the idea of the single tax: “Taxes should bear lightly on an infinite number of points, heavily on none. In other words, simplicity in taxation is the greatest additional weight that can be given to taxes and ought, in every country, to be most sedulously avoided.”—i, p. 596. In an earlier work, *Political Arithmetic*, 1774, Young discusses Locke’s theories at some length. Cf. pp. 211 *et seq.*

cally to the effects of the excise. In France the two attempts to develop a theory of fiscal reform that were made by Boisguillebert and Vauban¹ met with such little favor in court circles that a quietus was put on the discussion of the topic for more than half a century. In Germany the only treatment of the subject, apart from the monotonous productions of the "Cameralistic" writers, is found in the controversialists on the scheme for the general excise at the close of the seventeenth and the beginning of the eighteenth centuries.² In Italy the number of authors was perhaps more numerous, but their influence was small.³

In our survey of the English literature, we have found almost as many views as there were writers. That taxes remain where they are imposed, that all taxes are shifted to the landowner, that they are shifted to the trader, that they rest on the laborer, that they rest on the rich consumer, that they do not rest on the consumer at all—these, and variations of these, doctrines meet us in bewildering confusion. Yet even here certain currents of thought may be discerned, and the attempt has been made in the preceding pages to point out the general direction of these currents. The great weakness in all the discussions, however, was the lack of any consistent economic theory in general, and of a theory of distribution in particular. Without such a general definite theory as a basis, the whole superstructure of the doctrine of incidence was necessarily both slight and unstable. It was

¹ Boisguillebert wrote the *Détail de la France*, 1697, and *Factum de la France*, 1707. Vauban wrote the *Projet d'une Dîme Royale*, 1707. Vauban's work was translated into English under the title *An Essay for a General Tax; or a Project for a Royal Tythe*. By the famous Monsieur Vauban, Marshal of France, etc. London, 1709. The translation was widely read and went through several editions.

² For these writers see "Der Accisestreit deutscher Finanztheoretiker im 17. und 18. Jahrhundert." Von Karl Th. von Inama-Sternegg. In the *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, vol. xxi (1865), pp. 514-546. Cf. also *Geschichte der National-ökonomik in Deutschland*. Von Wilhelm Roscher. München, 1874, pp. 319-326.

³ For these, see *Storia delle Dottrine Finanziarie in Italia*. Dal Prof. G. Ricca-Salerno. Roma, 1881 (2d edition, 1895).

reserved for the Physiocrats and Adam Smith to formulate for the first time a consistent theory of distribution as the very basis of the new political economy, and it is accordingly with them that the modern theories of the incidence of taxation begin. It is these modern theories that will now engage our attention.

BOOK II

THE MODERN THEORIES

CHAPTER I

THE PHYSIOCRATIC THEORY

THE Physiocratic theory of incidence was outlined by the founder of the sect, Quesnay; it was developed by Mirabeau; it was discussed from all sides by Mercier de la Rivière, by Du Pont de Nemours, and by the Abbé Baudeau; and it was finally completed by various works of Turgot. The theory may be summed up as follows: Agriculture is the sole source of wealth. It is the only productive employment because it alone furnishes a *produit net* or surplus above the necessary expenses of production. These necessary expenses the Physiocrats call the agricultural advances or outlay. They are of two kinds: first, the primitive advances (*avances primitives*), consisting of the capital applied to land in the shape of implements, beasts of burden, clearing and preparing the soil; and secondly, the annual advances (*avances annuelles*), or the capital spent on wages and on maintaining the primitive advances—that is, in keeping the land, animals and tools in good condition. The gross product is called by them the returns of agriculture (*reprises de la culture*); and after deducting from this gross product the annual advances plus the interest on the primitive advances, there remains the net produce or the surplus above the expenses of cultivation.

Agriculture alone furnishes such a surplus. All other occupations are utterly unproductive or “sterile.” Industry and commerce may be useful and even necessary to a community; but they are economically unproductive. They do not create new wealth, but simply transform existing wealth. They may increase values, but the increase of value must be

exactly equivalent to the labor expended; and the value of this labor is in last resort dependent on the value of the food or the other objects furnished by the agricultural class. Since the "net product" of agriculture is therefore the sole fund or source of wealth, all taxes, however levied, must ultimately be paid from this fund. Hence it is much better to assess this fund *directly* by a land tax, than to assess it *indirectly* by any other tax. For in this way we save expense and trouble. But whether we levy direct or so-called indirect taxes, the incidence is always on the land.

Although there now exists in English an admirable sketch¹ of the general economic doctrines of the Physiocrats, the absence of any detailed account of their fiscal views, as well as the lack of any English translation of their chief works,² justifies a somewhat extended presentation of their doctrine of the incidence of taxation.

The fullest and the best account of the doctrine of incidence is found in the works of Quesnay.³ This writer posits the maxim that taxes should bear some proportion to the mass of national income, and that they should be imposed directly on the net produce of land, not on wages or commodities. The outlay for agriculture should be regarded as something precious, to be preserved as a fund not only for the payment of taxes, but for the creation of the social income and for the subsistence of the citizens. Otherwise, taxation becomes mere spoliation.⁴

¹ Higgs, *The Physiocrats*. London, 1897.

² The only English translation is that of Turgot, *Reflections on the Formation and Distribution of Wealth*, London, 1793; and again, with a slightly different title, in Professor Ashley's *Series of Economic Classics*, New York, 1898. But this deals only to a slight extent with problems of taxation.

³ The best edition of Quesnay's writings is *Œuvres Économiques et Philosophiques de F. Quesnay, Fondateur du Système Physiocratique*, avec une Introduction et des Notes par Auguste Oncken. Francfort-sur-le-Main, 1888. A less complete, but more familiar, edition is that of E. Daire, in the volume of the *Collection des principaux Économistes*, entitled *Physiocrates*. Paris, 1846.

⁴ "Que l'impôt ne soit pas destructif, ou disproportionné à la masse du revenu de la nation; que son augmentation suive l'augmentation du revenu; qu'il soit établi immédiatement sur le produit net des biens fonds, et non sur le salaire des

Quesnay proceeds to illustrate this doctrine as follows: A well-regulated tax should be deemed a part of the income separated from the net produce of the soil; for otherwise it would be impossible to frame any rule of proportion between taxation and wealth or income. All the taxpayers might be ruined before the government would notice it. The real net produce, he continues, may be divided into three parts, belonging respectively to the state, to the landowner, and to those who collect the tithe. Only the landowner's portion is subject to sale, and its price will vary with the revenue it yields. The landowner's property extends only to this portion. He therefore does not pay the others who share in the property, for their portions do not belong to him, have never been acquired by him, and cannot be sold. The landowner then must not look upon a tax as a charge imposed upon his share. He does not pay the ordinary tax; it is the part of the property which does not belong to him, that pays the tax. It is only in extraordinary exigencies, when the very safety of the property itself is imperilled, that all the co-proprietors must, for the time being, share in the burden.¹

hommes, ni sur les denrées, où il multiplierait les frais de perception, préjudicierait au commerce et détruirait annuellement une partie des richesses de la nation. Qu'il ne se prenne pas non plus sur les richesses des fermiers des biens-fonds; car LES AVANCES DE L'AGRICULTURE D'UN ROYAUME DOIVENT ÊTRE ENVISAGÉES COMME UN IMMEUBLE QU'IL FAUT CONSERVER PRÉCIEUSEMENT POUR LA PRODUCTION DE L'IMPÔT, DU REVENU, ET DE LA SUBSISTANCE DE TOUTES LES CLASSES DES CITOYENS: autrement l'impôt dégénère en spoliation et cause un dépérissement qui ruine promptement un État." — *Maximes Générales du Gouvernement Économique d'un Royaume Agricole*. 1758, no. v. In Daire's *Physiocrates*, p. 83; in Oncken's *Œuvres de Quesnay*, p. 332.

¹ "L'impôt bien ordonné . . . doit être regardé comme partie du revenu détachée du produit net des biens-fonds . . . Le produit net des biens-fonds se distribue à trois propriétaires, à l'État, aux possesseurs des terres et aux décimateurs. Il n'y a que la portion du possesseur du bien qui soit aliénable, et elle ne se vend qu'à raison du revenu qu'elle produit. La propriété du possesseur ne s'étend donc pas au-delà. Ce n'est donc pas lui qui paye les autres propriétaires qui ont part au bien, puisque leurs parts ne lui appartiennent pas, qu'il ne les a pas acquises, et qu'elles ne sont pas aliénables. Le possesseur du bien ne doit donc pas regarder l'impôt ordinaire comme une charge établie sur sa portion; car ce n'est pas lui qui paye ce revenu, c'est la partie du bien qu'il n'a pas acquise, et qui ne lui appartient pas, qui le paye à qui il est dû. Et ce n'est que dans les cas

It should not be forgotten, Quesnay warns us, that taxes ought to be imposed on real income — that is, on the annual net produce of lands — and not on the wages of the farm laborer, or on the wages of the industrial laborer, or on commodities. If levied on agricultural wages, a tax would impede production, injure the land, and ruin the farmers, the landowners and the government. If levied on the wages of industrial laborers or on commodities, a tax would be arbitrary, the cost of collection would exceed the yield of the tax, and the burden would fall without any uniformity on the income of the sovereign and of the people. We must be careful, he continues, to distinguish between a tax or impost on the one hand, and an imposition on the other. Impositions would amount to triple the imposts, and would extend to the imposts themselves; for the impositions or false taxes levied on commodities would have to be paid finally by the imposts or real taxes.¹

The so-called tax or imposition on men who live by their labor, says Quesnay, is really a tax on labor, which is necessarily paid by the employer just as a tax on the horses used on a farm is really a tax on the expenses of cultivation. Therefore a tax on men, instead of on revenue, would rest on the expenses of industry and agriculture, would fall with

de nécessité, dans les cas où la sûreté de la propriété serait exposée, que tous les propriétaires doivent pour leur propre intérêt contribuer sur leurs portions à la subvention passagère que les besoins pressants de l'État peuvent exiger." — Daire, pp. 83, 84; Oncken, pp. 337, 338.

¹ "Mais il ne faut pas oublier que dans tous les cas l'imposition du tribut ne doit porter que sur le revenu, c'est-à-dire sur le produit net annuel des biens fonds; et non sur les avances des laboureurs, ni sur les hommes de travail, ni sur la vente des marchandises, car autrement il serait destructif. Sur les avances des laboureurs ce ne serait pas un impôt, mais une spoliation qui éteindrait la reproduction, détériorerait les terres, ruinerait les fermiers, les propriétaires et l'Etat. Sur le salaire des hommes de travail et sur la vente des marchandises, il serait arbitraire, les frais de perception surpasseraient l'impôt, et retomberaient sans règle sur les revenus de la nation et sur ceux du souverain. Il faut distinguer ici l'imposition d'avec l'impôt; l'imposition serait le triple de l'impôt, et s'étendrait sur l'impôt même; car, dans toutes les dépenses de l'Etat, les taxes imposées sur les marchandises seraient payées par l'impôt. Ainsi cet impôt serait trompeur et ruineux." — Daire, p. 54; Oncken, p. 338.

redoubled force on the revenue of land (since all industry rests on the land), and would rapidly lead to the destruction of real taxation itself. The same may be said of taxes on commodities.

A tax levied indiscriminately on land, on products, on men, on labor, on commodities and on beasts of burden would involve a combination of six equal taxes, superimposed the one on the other, all resting on the same base and yet paid separately — but all together yielding less revenue than a simple real tax, assessed without expense and solely on the net produce. Such a tax, suggested by the order of nature, would greatly increase the revenue of the sovereign, but would nevertheless cost the nation and the state five-sixths less than the taxes imposed on everything. The latter, moreover, would annihilate the country's production and would exclude all possibility of ultimate reform. For these taxes, illusory for the sovereign and ruinous to the nation, appear to the vulgar all the more inevitable as the decay of agriculture progresses.

Quesnay concludes, therefore, that taxes should be imposed directly on the net produce of land; for, no matter how the tax is imposed, it is always paid by the land. Hence the form of taxation which is at once the simplest, the best regulated, the most productive and the least burdensome, is that which is levied proportionally to net produce and directly on the source of the ever new-born wealth.¹

In another work,² Quesnay devotes himself specifically to the problem of indirect taxation. Some indirect taxes, he tells us, are comparatively simple and economical. Such,

¹ "L'impôt doit donc être pris immédiatement sur le produit net des biens-fonds; car, de quelque manière qu'il soit imposé dans un royaume qui tire ses richesses de son territoire, il est toujours payé par les biens-fonds. Ainsi la forme d'imposition la plus simple, la plus réglée, la plus profitable à l'État, et la moins onéreuse aux contribuables, est celle qui est établie proportionnellement au produit net et immédiatement à la source des richesses continuellement renaissantes." — Daire, pp. 84, 85; Oncken, p. 339.

² *Second Problème Économique*: déterminer les Effets d'un Impôt Indirect. In *Physiocrates*, Daire's edition, pp. 127 et seq.; in *Œuvres*, Oncken's edition, pp. 697 et seq.

for instance, are the general property or income tax, known as the *taille personnelle*, the poll tax, the *corvée* or road tax, the tax on house rent, and the tax on funds. Others are more complex and more costly to collect. Such are the taxes on products and merchandises, import and export duties, internal tolls, taxes on transportation and communication, on sales, on offices and positions, on privileges and franchises. All these taxes together form an aggregate that may be summed up under the name of the *indirect tax*; the various expenses of collection and other surcharges, constitute another mass which may be called the *cost of the indirect tax*.¹

Quesnay proceeds to call attention to the evil results of all these indirect taxes. Following the detailed figures of his celebrated *Economic Table*,² he calculates the actual losses to the community. If, for instance, instead of a direct tax of 800 millions, only 300 millions were raised by a land tax, and 500 millions by indirect taxes, Quesnay figures out that the landowners would have to pay 235 millions more, that the government would lose 379 millions, and that wages would fall by a sum of 318 millions, making a

¹ "Il y a des impôts indirects, simples et peu dispendieux dans leur perception. Tels sont ceux qui s'établiraient sur les hommes en forme de taille personnelle, de capitation, de corvées, de taxes sur les loyers de maisons, sur les rentes pécuniaires, etc. D'autres sont fort composés, et entraînent une perception fort dispendieuse. Tels sont ceux qui seraient établis sur les denrées et marchandises, aux entrées, aux sorties, aux péages, aux douanes, ou sur les navigations et charrois du commerce intérieur et extérieur, ou sur la circulation de l'argent dans les achats et dans les ventes de toute espèce; telles sont aussi les créations de charges et d'offices, avec attribution perpétuelle ou à terme de droits et taxes, au profit de ceux qui en seraient revêtus, les privilèges de commerce exclusif, etc. . . . Mais la réunion de ces divers impôts indirects, plus au moins onéreux, formant une masse totale que l'on peut en général appeler *l'impôt indirect*, la réunion des frais de perception et des autres surcharges que tous ces divers impôts entraînent à leur suite, présente une autre masse que l'on peut appeler aussi en général les *frais de l'impôt indirect*, et dont la quotité, considérée relativement à la somme que le souverain retire de la totalité des impôts indirects, établit le taux moyen des frais de perception des impôts de ce genre." — Daire, p. 127; Oncken, pp. 697, 698.

² *Le Tableau Économique*. This was reprinted by the British Economic Association in 1894.

total loss to the community of 932 millions. In addition to this immense money loss, the other resulting evils may be summed up under four heads. First in order comes the rapid deterioration of the land, due partly to the decrease in agricultural capital, partly to the fear of employing new machines or adopting new processes which would be subject to indirect taxes, partly to the ravages made in the substance of the cultivators themselves. Secondly, we notice the immense fortunes of the tax-collectors, which impede the circulation of money and its return to agriculture. Thirdly, is to be mentioned the residence of the rich financiers in the capital, which tends to separate consumption from the place of production. And, fourthly, we must not forget the multiplication of beggars, which is to be directly ascribed to indirect taxation; for indirect taxes, by annihilating a part of the annual reproduction of wealth, destroy wages and the means of subsistence. The increase of beggary, again, in last resort means an additional burden on the landowners; for they dare not refuse alms.¹

Quesnay is severe on the landowners for not recognizing the wisdom of the single tax. The tax seems to them excessive. Their ignorant cupidity has never allowed them to see that taxes can really be imposed only on the revenue of the land. They have always thought that taxes ought to be levied on men or on the things consumed by men, because all men share in the benefits of the protection of government. They have never reflected that man, whose physical constitution depends on the satisfaction of his wants, can do nothing by himself; and that all taxes imposed on men, or on the things they consume, are necessarily taken from the wealth on which men live and which the land alone produces.²

¹ Daire, pp. 139, 140; Oncken, pp. 716, 717.

² "Mais ce revenu public de 800 millions, qui embrasse directement les *deux septièmes* du produit net du territoire, aurait paru excessif aux propriétaires fonciers. Leur cupidité ignorante ne leur a jamais laissé apercevoir que l'impôt ne doit être pris que sur le revenu des terres. Ils ont toujours pensé que l'impôt devait être établi sur les hommes ou sur les consommations que font les hommes, parce que les hommes participent tous à la protection de la puissance souveraine.

As a result of his whole discussion, Quesnay concludes that no matter how it is arranged, the productive class, the landowners and the tax itself—as the first distributors of the total expenses—inevitably pay the whole of the indirect taxes levied on the men they employ, or on the goods and commodities they consume; and each one contributes to the tax in proportion to his share of the expenses.¹

Quesnay's theories were soon adopted by a number of enthusiastic followers. The Marquis of Mirabeau devoted a special book to the subject of taxation, laying down the general principle that "taxes should be levied directly on the annual reproduction," or "on the source of all revenue."² In another place he points out that no matter how the tax is imposed, it must be paid from the net product; and unless it is assessed directly on this product we are without base or compass.³ A few years later another writer, Saint Péravy, devoted a separate work to the study of indirect taxes, from the same point of view.⁴

Mercier de la Rivière, perhaps the clearest thinker of the Physiocrats, took especial pains in making this distinction

Ils n'ont nullement songé que l'homme, dont la constitution physique ne présente que des besoins, ne peut rien par lui-même; et que toute imposition mise sur les hommes, ou sur leur consommation, serait nécessairement prise sur les richesses qui font subsister les hommes, et que la terre seule produit."—Daire, p. 131; Oncken, p. 704.

¹ "Ainsi, de quelque façon qu'on s'arrange, la classe productive, les propriétaires des terres, et l'impôt même, comme premiers distributeurs des dépenses payent inévitablement la totalité de l'imposition indirecte que l'on établit sur les hommes qu'ils salarient, ou sur les denrées et marchandises qu'ils consomment; et ils y contribuent chacun à raison de la distribution de ses dépenses."—Daire, p. 134; Oncken, p. 707.

² "L'Impôt doit être établi immédiatement sur la reproduction annuelle."—*Théorie de l'Impôt*. [Par Le Marquis de Mirabeau.] 1760, p. 123. "Que l'impôt soit établi immédiatement à la source des revenus."—*Ibid.*, p. 131. In the more common octavo edition of 1761 these passages are found on pp. 150 and 160.

³ "De quelque manière que se retourne l'impôt il est impossible qu'il provienne d'autre part que du produit; s'il n'est pris directement sur le produit net qui constitue le revenu, il n'a plus ni base, ni boussole."—*L'Ami des Hommes, ou Traité de la Population*, 1757, tome vii, p. 45. Cf. pp. 47, 171.

⁴ *Mémoire sur les Effets de l'Impôt Indirect*. Par Saint Péravy. 1768.

between direct and indirect taxes hinge on the question of incidence. The essential form of taxation, he tells us, consists in taking the tax directly where it is, and in not trying to take it where it is not. It is clear that the funds destined to the payment of taxes are to be found only in the hands of the landowners, or rather of the farmers. They receive these funds from the land, and when they give them up to the king, they are not really giving anything that belongs to them. On them, therefore, we must lay the tax, if we wish to burden nobody. To change this direct form of taxation, and to give it an indirect form, is to reverse the natural order, from which we cannot deviate without the greatest evils. Taxation is indirect, when it is levied on persons or on commodities. In both cases the damage to the king and to the people alike is enormous and inevitable.¹

The evils above referred to, he tells us in another passage, are inherent in the very nature of indirect taxes. The name itself tells us that the tax is not borne by those on whom it seems to be directly laid; and that is perfectly true. Even when it appears to have nothing to do with the landowners, it falls on them—and with considerable additions; for it always costs them more than the king receives. In certain cases it even causes them to suffer losses which redound to

¹ "Ainsi la forme essentielle de l'impôt consiste à prendre *directement* l'impôt où il est, et à ne pas vouloir le prendre où il n'est pas. . . . Il est évident que les fonds qui appartiennent à l'impôt ne peuvent se trouver que dans les mains des propriétaires fonciers, ou plutôt des cultivateurs ou fermiers qui, à cet égard, les représentent; ceux-ci reçoivent ces fonds de la terre même et, lorsqu'ils les rendent au souverain, ils ne donnent rien de ce qui leur appartient; c'est donc à eux qu'il faut demander l'impôt, pour qu'il ne soit à la charge de personne. Changer cette forme *directe* de l'établissement de l'impôt pour lui donner une forme *indirecte*, c'est renverser un ordre naturel dont on ne peut s'écarter sans les plus grands inconvénients.

"La forme de l'impôt est *indirecte* lorsqu'il est établi ou sur les personnes mêmes ou sur les choses commerçables: dans l'un et l'autre cas, les préjudices qu'il cause au souverain et à la nation sont énormes et inévitables, et ils sont à-peu-près les mêmes, quoiqu'ils aient une marche et une gradation différentes." — *L'Ordre Naturel et Essentiel des Sociétés Politiques*. [Par Mercier de la Rivière.] Londres, 1767, chap. xxx, p. 243. In Daire, *Physiocrates*, it is reprinted as chapter iv, p. 474.

no one's advantage, and it thus brings about a progressive decrease in the total quantity of wealth.¹

Therefore, he concludes, in the essential order of society (to outline which his whole book is written) taxation is entirely independent. The revenue it yields is the necessary result of a combination of causes which always remain the same and always produce the same effects. But this valuable advantage can be retained only so far as its essential form is not changed, and as the king directly seizes the portion that his co-ownership in the lands of his dominion gives him a right to take.²

The great popularizer of the Physiocratic doctrines, Du Pont de Nemours, who subsequently tried to impress his ideas of incidence on the French revolutionary parliament, put the theory in a little different way.³ Taxes, he tells us, cannot be imposed indifferently on all kinds of wealth. Nature has not given to that form of wealth which is used in agricultural production the power of making any contribution to taxes. She has, in fact, imperiously subjected it to the law of being wholly consumed in keeping up the cultivation of the land itself, on pain of seeing cultivation, the crops, the people, the empire itself gradually disappear. That portion

¹ "Les inconvénients dont je veux parler sont dans la nature même de l'impôt *indirect*. Le nom qu'on lui donne ici annonce qu'il n'est point supporté par ceux sur lesquels il semble être *directement* établi, et cela est vrai : lors même qu'il paroît totalement étranger aux propriétaires fonciers, il retombe sur eux, et à grands frais, car il leur coûte toujours beaucoup plus qu'il ne rend au Souverain ; il leur occasionne même, en certains cas, des pertes sèches dont personne ne profite, des diminutions progressives de la masse commune des richesses disponibles, dans lesquelles le Souverain doit partager, et qui sont la mesure de sa puissance politique." — *L'Ordre Naturel et Essentiel des Sociétés Politiques*, p. 247. In Daire's ed., p. 476.

² "Ainsi, dans l'ordre essentiel des sociétés, l'impôt est totalement indépendant ; le produit qu'il donne annuellement est le fruit nécessaire d'un enchaînement de diverses causes qui seront toujours les mêmes, et qui produiront toujours les mêmes effets. Mais il ne peut conserver cet avantage précieux qu'autant qu'on ne change point sa forme essentielle, que le souverain prend directement la part proportionnelle que sa copropriété lui donne droit de prendre dans les produits nets des terres de sa domination." — *Ibid.*, p. 249. In Daire's ed., p. 478.

³ In his *De l'Origine et des Progrès d'une Science Nouvelle*. [Par P. S. Du Pont du Nemours.] Londres, 1768. In Daire's *Physiocrates*, p. 335.

of the crops which is called the net produce is, then, the only part naturally subject to taxation.¹

The aim of taxation, Du Pont tells us in another place, is the preservation of the rights of property and of liberty in their original and natural extent. All kinds of taxes which curtail liberty and property, and which therefore necessarily diminish wealth and population, would thus be clearly contrary to the aim of taxation. If duties were levied on persons, on commodities, on expense, or on consumption, their collection would be costly, their existence would impede the liberty of human effort, and they would necessarily increase the expenses of commerce and agriculture.²

Coming, then, more specifically to the problem of shifting, Du Pont contends that when an indirect route is taken in the assessment of a tax, it is none the less paid, in last analysis, by the net produce of land. But it is then extremely disastrous and much more burdensome to the landowners. It curtails liberty and restrains property; it lowers the price of produce in the hands of the producer; it decreases the mass of products, and still more the sum of national revenues; it leads to misery and depopulation; it ruins by degrees the

¹ "L'impôt ne saurait même porter indifféremment sur toutes les richesses renaissantes. La nature a refusé à celles qu'on appelle *reprises des cultivateurs* la faculté de contribuer à l'impôt, puisqu'elle leur a impérieusement imposé la loi d'être employées en entier à entretenir et à perpétuer la culture, sous peine de voir anéantir par degrés la culture, les récoltes, la population, les empires.

"La portion des récoltes nommée le *produit net*, est donc la seule contribuable à l'impôt, la seule que la nature ait rendue propre à y subvenir.

"Il est donc de l'essence de l'impôt d'être une portion du *produit net* de la culture." — *Ibid.*, p. 351.

² "Le but de l'impôt est la conservation du droit de propriété et de la liberté de l'homme dans toute leur étendue naturelle et primitive; conservation qui peut seule assurer la multiplication des richesses et de la population.

"Toute forme d'imposition qui restreindrait la propriété et la liberté de l'homme, et qui diminuerait nécessairement les richesses et la population, serait donc manifestement opposée au but de l'impôt.

"Si l'on établissait des impositions sur les personnes, sur les marchandises, sur les dépenses, sur les consommations, la perception de ces impositions serait fort coûteuse; leur existence gênerait la liberté des travaux humains, et augmenterait nécessairement les frais de commerce et de culture." — *Ibid.*, pp. 351, 352.

soil, the farmers, the landowners, the nation and the king.¹ It is no wonder that, holding such views, the Physiocrats summed up their theory of taxation in the famous phrase: Indirect taxes, poor peasants; poor peasants, poor kingdom; poor kingdom, poor king.²

The Abbé Baudeau develops the same line of thought. Instead of the net produce, he speaks of "the clear and liquid annual revenue of land," which he thinks is so simple an idea that it is self-evident.³ Baudeau emphasizes the fact already alluded to by Quesnay, and subsequently worked out more lucidly by Turgot—namely, that a part of this "clear revenue" must really be regarded as belonging not to the owner but to the king; and that therefore, when a man buys a piece of land, he buys not the whole of its revenue, but only that part which is not due to government. The payment due to the king by virtue of his right of sovereignty is, therefore, not really a tax at all; it is not, as many people say of taxation in general, a sacrifice which each citizen makes of a part of his property in order to keep the rest.⁴

¹ "Nous venons de voir que lorsqu'on veut prendre une route indirecte pour lever l'impôt, il n'en est pas moins payé, en dernière analyse, par le *produit net* des biens-fonds; mais qu'il l'est alors d'une manière extrêmement désastreuse et beaucoup plus onéreuse pour les propriétaires fonciers; qu'il gêne la liberté et restreint la propriété des citoyens; qu'il fait baisser le prix des productions, à la vente de la première main; qu'il diminue la masse des produits, et encore plus la somme des revenus du territoire; qu'il amène la misère et la dépopulation; qu'il ruine par degrés la culture, les cultivateurs, les propriétaires fonciers, la nation et le souverain." — *De l'Origine et des Progrès d'une Science Nouvelle*, p. 354.

² "Impositions indirectes; pauvres paysans. Pauvres paysans; pauvre royaume. Pauvre royaume; pauvre roi." — *Ibid.*, p. 354.

³ "Vouloir connaître le revenu clair et liquide annuel de chaque terre par estimation commune de son état habituel, c'est donc chercher une chose toute trouvée." — *Première Introduction à la Philosophie Économique, ou Analyse des États Politiques*. [Par Nicolas Baudeau.] 1771. In Daire's *Physiocrates*, p. 767. Similar ideas may be found in Baudeau's earlier work, *Lettres d'un Citoyen à un Magistrat sur les Vingtièmes et les autres Impôts*. 1768.

⁴ "Tout propriétaire saurait qu'il n'acquiert pour ses héritiers, pour ses cessionnaires ou ayant-cause, que quatorze vingtièmes, ou un peu plus de deux tiers, du produit net annuel d'un fonds mis en exploitation; que le reste n'est pas à lui, mais à la souveraineté.

"Il sait que le droit de la souveraineté, sur un peu moins du tiers des revenus

The specific question of the incidence of export and import duties, as well as of taxes on communication and transportation in general, was treated at considerable length by another of the Physiocrats, Le Trosne. Most of what he says deserves careful attention even to-day, especially when he discusses the conditions under which a part of the export or import duties is supposed to rest finally on the foreign country.¹ But these are points of detail, the consideration of which would lead us too far astray in this place.

The most cautious as well as the greatest of the Physiocrats was Turgot. In discussing the question of the real incidence of the land tax, Turgot expounds very clearly what came to be known subsequently as the capitalization theory. If land alone were subject to taxation, says he, once the tax was settled, the capitalist purchaser would not count in the interest of his money the part devoted to the payment of the tax—just as a man who to-day buys a piece of land does not buy the tithe which the priest receives or the land tax, but buys only the income which remains after deducting the tithe and the tax.²

territoriaux clairs et liquides, est fondé, comme tout droit juste et raisonnable, sur des avances faites, sur des travaux accomplis ci-devant, et encore sur les mêmes avances, les mêmes travaux à continuer; sur leur efficacité, productive de ces mêmes revenus, dont ils sont une cause efficiente, une des conditions indispensables sans lesquelles il n'existerait point un tel produit net.

"Cette perception, ainsi réglée, n'a donc point les caractères de ce qu'on appelle impôt; ce n'est point, comme on le dit avec quelque apparence de raison dans les États mal administrés, un sacrifice que chacun fait, d'une portion de sa propriété, pour conserver le reste." — Daire's *Physiocrates*, pp. 762, 763.

¹ *De l'Intérêt Social, par rapport à la Valeur, à la Circulation, à l'Industrie et au Commerce Intérieur et Extérieur.* Par Guillaume-François Le Trosne. 1777. In Daire's *Physiocrates*, esp. pp. 988-1007.

² "Je réponds, en second lieu que, si les terres étaient chargées seules de la contribution aux dépenses publiques, dès qu'une fois cette contribution serait réglée, le capitaliste qui les achèterait ne compterait pas dans l'intérêt de son argent la partie du revenu affectée à cette contribution; de même qu'un homme qui achète aujourd'hui une terre n'achète pas la dîme que reçoit le curé, ni même l'impôt connu, mais le revenu qui reste, déduction faite de cette dîme et cet impôt." — *Réflexions sur la Formation et la Distribution des Richesses*, § 97. Cf. his *Comparaison de l'Impôt direct et de l'Impôt indirect*, in *Œuvres de Turgot*, edited by Daire. Paris, 1844, i, p. 413.

In an early memoir, written in 1764, Turgot maintains that all taxes must be paid out of income. He then proceeds to a discussion of income in general, in the course of which he elaborates the doctrine of the *produit net* which alone constitutes the real social revenue, disposable for purposes of taxation. The landowner, says he, is the only one who has a real income:¹ every other conception of income is illusory.² It follows, therefore, that all taxes, howsoever levied, are ultimately paid from this income.

This leads Turgot to distinguish between direct and indirect taxes. In a later memoir, he gives a formal definition of these terms. The tax which the landowner pays immediately out of his income, he tells us, is called a direct tax; the tax which is not directly assessed on the income is called an indirect tax. Indirect taxes may be reduced to three chief classes: the tax on the tenant farmer, the tax on the profits of capital or industry, and the tax on commodities sold or consumed. The landowner, however, bears the burden of the indirect tax in two ways: through an increase of his expenses, and through a decrease of his income.³ The term

¹ "Le propriétaire de fonds est le seul qui ait un véritable revenu." — *Plan d'un Mémoire sur les Impositions en Général*, etc., in *Œuvres de Turgot*, i, p. 400.

² "Tout autre idée de revenu est illusoire. Lorsqu'on achète un bien-fonds, c'est ce revenu seul qu'on achète." — *Ibid.*, p. 402.

³ "L'impôt que le propriétaire paye immédiatement sur son revenu est appelé *impôt direct*. L'impôt qui n'est point assis directement sur le revenu du propriétaire, mais qui porte ou sur les frais productifs du revenu, ou sur les dépenses de ce revenu, est appelé *impôt indirect*."

"L'impôt indirect, malgré la variété des formes dont il est susceptible, peut se réduire à trois classes :

"L'impôt sur les cultivateurs; — l'impôt sur les profits de l'argent ou de l'industrie; — l'impôt sur les marchandises passantes, vendues ou consommées.

"Ces trois classes, et les différentes formes d'impositions dans lesquelles elles se subdivisent, peuvent retomber sur les propriétaires par un circuit plus ou moins long, et d'une manière plus ou moins onéreuse.

"Les propriétaires payent l'impôt indirect de deux façons, en augmentation de dépense et en diminution de revenu." — *Explications sur le Sujet du Prix offert par la Société Royale de l'Agriculture de Limoges au Mémoire dans lequel on aurait le mieux démontré l'Effet de l'Impôt Indirect sur le Revenu des Propriétaires de Bien-Fonds*; in *Œuvres de Turgot*, i, pp. 416, 417.

"indirect tax," therefore, covers every tax except a direct tax on the net revenue of land.¹

In another place, Turgot tries to meet the objection of those who maintained that wealth in general is the source of taxation. It is not all real wealth, he tells us, that can pay taxes. To serve this purpose, wealth must be *disposable*, — that is, it must not be needed for the reproduction of the following year, directly or indirectly. All wealth may indeed be taken by main force; but no wealth necessary to the work of reproduction can be diverted from this end without injury to the national wealth, and consequently to the power of the government. In the recognition of this principle consists the whole theory of taxation.²

Finally, in a memoir said to have been written for Benjamin Franklin, Turgot develops more fully his theories of the shifting of all indirect taxes to the landowner.³ Yet, notwithstanding his theories, Turgot, while at the head of the treasury, made no attempt, as is sometimes asserted, to put the plan of the single tax into actual operation. He was too great a statesman to commit himself to any such hazardous scheme.

The Physiocrats, it may be remarked in passing, exercised a perceptible influence on contemporary American thought. In

¹ Elsewhere, however, Turgot also classes a poll tax as a direct tax. But if the poll tax be graded so as to reach the "faculties, industry, profits or wages," it must be called an indirect tax. — *Ibid.*, i, p. 396.

² "Ce n'est pas toute richesse réelle, comme le croit l'auteur, qui peut payer l'impôt; il faut encore qu'elle soit *disponible*, c'est-à-dire qu'elle ne soit pas nécessaire à la reproduction de l'année suivante, soit immédiatement, soit médiatement. Toute richesse nécessaire aux travaux de la reproduction n'en peut être détournée sans nuire à cette reproduction, à la richesse nationale, et par suite aux moyens de puissance du gouvernement. Voilà toute la théorie de l'impôt." In *Observations sur le Mémoire de M. Graslin en faveur de l'Impôt Indirect*. — *Œuvres*, i, pp. 434, 435.

³ *Comparaison de l'Impôt sur le Revenu des Propriétaires et l'Impôt sur les Consommations*. — *Œuvres*, ii, p. 409. Du Pont de Nemours says that this was written to dissuade Hamilton, then Secretary of the Treasury, from adopting his scheme of indirect taxes. But as Turgot had been dead several years before Hamilton formulated his scheme, this is clearly impossible. Yet the statement that the memoir was originally written for Franklin may be true.

a number of the writings of the foremost American statesmen there are continual references to the doctrines of the "Economists." Benjamin Franklin, for instance, carried on an extended correspondence with the Abbé Morellet and with Le Veillard. In one of his later letters, he refers to the doctrine as among the principles of economics which he originally shared; but his great practical sense convinced him of the futility of the attempt to apply the scheme in America.¹ Alexander Hamilton also seems, in one of the essays in the *Continentalist*, to have shared the opinions of the Physiocrats.² A careful reading of the context, however, shows that Hamilton did not advocate any scheme for a single tax on land. In fact, he adds in another place that "particular caution ought at present to be observed in this country, not to burden the soil itself and its productions with heavy impositions."

An eminent French writer, M. Leroy-Beaulieu, has fallen into a curious error. The Physiocrats, according to him, held that, even if the single tax were imposed, the landowners would lose nothing because their products would rise in price and would thus reimburse the proprietors for their original outlay.³ This, however, is a mistake. The cardinal doctrine of the Physiocrats was that all taxes fall ultimately on the

¹ "I have not lost any of the principles of public economy you once knew me possessed of. . . . Our legislators are all landowners, and they are not yet persuaded that all taxes are paid by the land." — *Letter to Mr. Small*, 1787. In *The Complete Works of Benjamin Franklin*, edited by John Bigelow. New York, 1887, ix, p. 414.

² "Many theorists in Political Economy have held, that all taxes, wherever they originate, fall upon land, and have therefore been of the opinion that it would be best to draw the whole revenue of the state immediately from that source. . . . But though it has been demonstrated that this theory has been carried to an extreme, impracticable in fact, yet it is evident, in tracing the matter, that a large part of all taxes, however remotely laid, will, by an insensible circulation, come at last to settle upon land—the source of most of the materials employed in commerce." — *The Continentalist*, vi, 1782. In *The Works of Alexander Hamilton*, edited by Henry Cabot Lodge. New York, 1885, i, p. 266.

³ *Science des Finances*. Par Paul Leroy-Beaulieu. Paris, 1892, 5th ed., i, p. 199.

landowners, and on them alone.¹ It was just because the Physiocrats supposed that the tax could not be shifted that they advocated the single tax. The landowners would, indeed, in their opinion, suffer less from a direct tax than from an indirect tax; for not only would the indirect taxes yield so little, relatively, that higher rates would be necessary, but they would tend to destroy the foundations on which the prosperity of the landowners rested. But the direct tax, even though less destructive, would still remain on those on whom it was originally imposed—the owners of the soil.

The Physiocratic doctrine of incidence does not need any formal refutation. Resting on the peculiar doctrine of the sole productivity of agriculture, it has been convicted of exaggeration and unreality.² The Physiocrats' theory of distribution and their conception of natural law may be said to have ushered in the modern period of economic science. But Adam Smith, who was in these respects so profoundly influenced by the Physiocrats, shattered the very foundations on which their third fundamental doctrine—that of the *produit net*—was based. If the Physiocrats developed what

¹ "Tout impôt est payé par le produit des terres, tout ce que l'impôt prend sur ce produit, après les partage fait par le souverain, forme un double emploi; tout double emploi retombe sur les propriétaires fonciers." — *L'Ordre Naturel*, etc. Par Mercier de la Rivière, chap. vii (p. 504 of Daire's ed.). "Tous les impôts sous quelque forme qu'ils soient perçus retombent nécessairement à la charge des propriétaires des biens fonds, et sont toujours en dernière analyse payés par eux seuls, ou directement, ou indirectement." — *Explications sur l'effet de l'Impôt Indirect*, in *Œuvres de Turgot* (Daire's ed.) i, 416.

² A good exposition of its weakness is made by Arthur Young in his *Political Arithmetic*, 1774, pp. 208–266. The best contemporary French refutation is contained in *Essai Analytique sur la Richesse et sur l'Impôt, où l'on refute la nouvelle doctrine économique . . . sur l'effet des Impôts indirects*. Par Louis François de Graslin. Londres, 1767. Graslin not only denies that the so-called indirect taxes are shifted to land, but contends that a tax imposed directly on land is sometimes shifted to the consumer. — *Ibid.*, pp. 230 *et al.* Another work very widely read at the time was the anonymous volume written to answer Mirabeau's book on taxation, under the title *Doutes proposés à l'Auteur de la Théorie de l'Impôt*. 1761. See especially pp. 24–48, "Sur quoi doit-on préférablement faire porter les impositions?"

might be called the agricultural system of economics, Adam Smith is responsible for the industrial system. Yet their theories of the incidence of taxation, apart from the peculiar doctrine of the *produit net*, are not so dissimilar as might be imagined.

CHAPTER II

THE ABSOLUTE THEORY

ON the subject of the incidence of taxation, as on almost every topic of economic inquiry, modern views are commonly traced back to the works of Adam Smith and Ricardo. For reasons that will soon appear, the doctrines advanced by these great thinkers may be summed up under the name of the absolute theory of incidence.

Adam Smith bases his investigation on the division of all revenue into rent, profits and wages. All taxes on land, says he, whether proportional to the rent or to the whole produce, are in reality taxes on rent. Although they may be originally advanced by the tenant, they are finally paid by the landlord. A tax on land rent necessarily falls on the owner; for the "farmer computes, as well as he can, what the value of the (tax) is, one year with another, likely to amount to, and he makes a proportionable abatement in the rent which he agrees to pay to the landlord." The farmer must have his reasonable profit as well as every other dealer. Hence "the more he is obliged to pay in the way of tax, the less he can afford to pay in the way of rent."¹ The case of a tax on house rent is slightly different, because house rent is really distinguishable into two separate ingredients — building rent and ground rent. The tax on ground rent, like that on the rent of land, will inevitably fall on the owner, because "the more the inhabitant was obliged to pay for the tax, the less he would incline to pay for the ground."²

¹ *An Inquiry into the Nature and Causes of the Wealth of Nations*. By Adam Smith, LL.D. London, 1776, book v, chap. ii. Vol. ii, pp. 417, 428. The quotations are from the edition of James E. Thorold Rogers, 2d ed., Oxford, 1880.

² *Ibid.*, ii, pp. 437, 440.

But that part of the rent which represents the building rent is simply the profits of the capital expended in building the house. This part of the tax will necessarily fall on the occupier; because, unless the builder secures the same return on his capital as other business men do, he will cease building houses until the increased demand for houses again raises the rent—that is, in this case, his profits—to the general level. A tax on house rent will therefore fall partly on the owner and partly on the occupier, but “in what proportion this final payment would be divided between them, it is not perhaps very easy to ascertain.”¹

Taxes on profits are simple of analysis. The profit arising from stock is divided by Adam Smith into two parts, that which pays the interest, and the surplus over and above the interest. A tax on the surplus above interest is always shifted, for this surplus is the “compensation for the risk and trouble of employing the stock” which the employer must have if he desires to continue the employment. It will be shifted either to the landowner or to the consumer, according as the stock is employed in farming or in mercantile business.² For if he employed it as “farming stock,” he could raise the rate of his profit only by reducing the amount he is called upon to pay to the landlord,—that is, the rent. But if he employed it as a “mercantile or manufacturing stock,” he could raise the rate of profit only by raising the price of his goods.

A tax on interest—that is, on what Smith regards as “the net produce which remains after completely compensating the whole risk and trouble of employing the stock”—seems to fall entirely on the owner, just as in the case of a tax on rent. But in reality the interest on money is a much less proper subject of direct taxation than rent, because land is tangible and easily ascertainable, while capital is not; and because land cannot be removed, while stock easily may be. To tax stock, therefore, would cause its removal from the

¹ *An Inquiry into the Nature and Causes of the Wealth of Nations*, ii, p. 434.

² *Ibid.*, ii, p. 441.

country, and put an end to all the industry which it had maintained. This would reduce not only the profits of stock, but also the rent of land and the wages of labor. A general tax on profits, therefore, affects other classes besides the employer.¹ A tax on the profits of stock employed in any particular branch of trade will, however, be shifted from the dealers to the consumers because the dealers must "in all ordinary cases have their reasonable profit." The consumers will have to pay, in the enhanced price of their goods, not only the tax advanced by the dealer, but generally some overcharge in addition.²

Taxes on wages, finally, are always shifted. This is due to the fact that the rate of wages is regulated by the demand for labor and by the average price of food. When these remain the same, a direct tax on wages "can have no other effect than to raise them somewhat higher than the tax." If the laborers were engaged in "manufacturing labor," the employer would have to raise wages, but would ultimately be obliged to charge the increase with a profit on the consumers. If the laborers were engaged in husbandry, the farmer would in the long run pay less rent to the landlord. But both the reduction of the rent and the rise of price will be greater than the amount of the tax.³ Whenever taxes on labor have not produced a proportionate rise in wages, it is because they have led to a fall in the demand for labor. The only results of this, however, have been a "declension of industry, a decrease of employment, and a diminution of the annual produce of the land and labor of the country." Even then, wages must always be higher than they would otherwise have been, and this increase of price must be finally paid by the consumers. The same argument holds good of the "recompense of ingenious artists and of men of liberal professions"; but it does not apply so completely to "the emoluments of

¹ "The proprietor of stock is properly a citizen of the world and is not necessarily attached to any particular country." — *Ibid.*, ii, p. 443.

² *Ibid.*, ii, p. 446.

³ *Ibid.*, ii, p. 461.

offices," because these are not regulated by the free competition of the market.

Finally, Adam Smith discusses taxes which are intended to "fall indifferently on every species of revenue." These are capitation taxes and taxes on consumable commodities. Capitation taxes, so far as they are levied on the lower classes, are taxes on wages, and subject to the same objections as those taxes,—that is, they are shifted to the consumers.¹ Taxes on commodities are levied either on necessities or on luxuries. Taxes on necessities raise the rate of wages (because wages are fixed partly by the price of necessities) and fall on the consumers or landlords. They act precisely like taxes on labor. Taxes on luxuries, on the other hand, will not raise wages, but will fall only on the consumers of the particular commodities. So far as the poor are concerned, they act simply as sumptuary laws. It is, therefore, always to the interest of the richer classes to oppose taxes on necessities; for all taxes on necessities are ultimately paid by them, while taxes on luxuries fall on them only to the extent that they are consumers of luxuries.²

If we sum up Adam Smith's doctrine of incidence, we see that taxes on wages, taxes on profits (except the tax on interest), and taxes on necessities are always shifted. On the other hand, taxes on land and taxes on luxuries always stay where they are put. The classes of society who bear all the taxes are thus primarily the landowners, the rich consumers and, to a certain extent, the lenders of capital.

Adam Smith's exposition, marked as it is by many profound and suggestive ideas, is entirely dependent upon his theories of rent, profits and wages. As soon as we question the validity of his theory of rent, of his treatment of wages as based on the necessities of life, or of his conception of ordinary profits, a large part of his doctrine of incidence falls to the ground. Modern economic theory no longer accepts these bases of his theory. Ricardo himself did much to over-

¹ *An Inquiry into the Nature and Causes of the Wealth of Nations*, ii, p. 466.

² *Ibid.*, ii, p. 470.

throw them. But so far as Adam Smith based his doctrine of incidence on the theory of free competition without any qualifications, and on the inevitable action of simple economic causes, he may be termed in a certain sense the forerunner of the absolute theory of incidence.

Ricardo's *Principles of Political Economy and Taxation* is largely devoted to the latter subject. With his accustomed penetration, Ricardo went at once to the core of tax problems, so that his work consists almost exclusively of an investigation of the problem of incidence. His discussion of this topic discloses the same merits and the same defects which are so characteristic of his other work. On the one hand, profound and acute analysis, marvellous power of isolating the phenomena and treating them as unaffected by disturbing causes; on the other hand, the implication that the hypothetical case is the real one, the inference that the formulæ deduced with mathematical accuracy and logical rigor from the assumed premises represent the actual economic facts; — these characteristics constitute at once the strength and the weakness of the Ricardian theories.

Ricardo, like Adam Smith, does not give any general theory of incidence. In both cases we must seek for the general principles of the authors in the discussions of separate taxes. Ricardo differs from Adam Smith in his theory of rent and in his doctrine of the relation of profits to wages. Ricardo's theory of economic rent leads him to controvert Adam Smith's doctrine of the ultimate incidence of land taxes on the landowner. A tax on rent, it is true, says Ricardo, will fall wholly on the landlord; for since rent is the surplus above the cost of production, the value of the product cannot possibly be affected by the tax.¹ But it is different with taxes on produce, tithes or land taxes: these will be shifted by the landowners to the consumers. Since price is fixed by the

¹ "A tax on rent would affect rent only; it would fall wholly on landlords, and could not be shifted to any class of consumers." — *On the Principles of Political Economy and Taxation*. By David Ricardo, Esq. London, 1817, chap. viii*, p. 221. In McCulloch's edition, 1876, this is found in chap. x, p. 102.

cost of production on land of the poorest quality, runs his argument, whatever increases cost raises price. But a tax which is imposed on all cultivators necessarily increases the cost of production. Hence, a tax on produce raises price and is shifted to the consumers. A rise in price is the only means by which the cultivator can pay the tax and continue to derive "the usual and general profits" from the employment of his capital. He cannot deduct the tax from his rent, for there is no rent on the land which fixes price. He will not deduct it from his profits, because there is no reason why he should stay in an employment with smaller profits. He can, therefore, pay the tax only by increasing the price.¹

All land taxes, accordingly, except the tax on pure rent, will, according to Ricardo, fall on the consumers. But although every one is a consumer, not all consumers will pay the tax. One large class, in particular, will remain exempt—the laborers; for a tax on raw produce, like any tax which increases the price of necessities of life, will inevitably raise wages. "Wages never continue much above that rate which nature and habit demand for the support of the labourer." But as wages rise, profits must fall. A land tax will therefore fall not on the landlord or the stockholders, but on the capitalist employer of labor.²

The question still remains whether the employer can shift the tax. In other words: What is the incidence of a tax on profits? Ricardo agrees with Adam Smith in holding that a tax on the profits of a particular class will be shifted to the consumers through a rise in price. But in the case of a tax on all profits, the problem is less simple. If no attention be paid to foreign trade, a rise of prices will ensue. But since money is a commodity imported from abroad, a rise in

¹ *On the Principles of Political Economy and Taxation*, chap. viii, pp. 194, 195, and chap. ix, p. 225. In McCulloch's ed. these are chap. ix, p. 91; and chap. xi, p. 104.

² *Ibid.*, p. 199 (McCulloch's ed., p. 93). Ricardo seeks to prove that there will not be any considerable interval between the rise in the price of corn and the rise of wages, during which the laborer would suffer. Here, as elsewhere, however, his conclusions are too rigid.

prices, if it occurred, could not be permanent. In return for commodities imported, the dear goods could not be exported. On the contrary, money would be exported until prices had fallen to their former level. The inference is that a tax on profits will be borne, not by the consumer, but by the producer.¹

Finally, a tax on wages, he contends, will raise wages. Ricardo here discusses the objections raised by Buchanan to the doctrine of Adam Smith. He does indeed make the two important concessions that every rise in the price of necessities does not necessarily raise wages, and that wages are not generally increased by the amount of the tax.² But with his characteristic fondness for the larger aspects of a problem, he goes on to argue as if these concessions did not invalidate his general doctrine. On the assumption, then, that taxes do raise wages, Ricardo concludes that they inevitably decrease profits.³ He objects, however, to Adam Smith's contention that the tax will be shifted to the consumers. For, says he, since all producers are consumers of each other's goods, every dealer would raise his prices by the increase which he is compelled to pay; and this process would go on indefinitely,

¹ "It appears to me absolutely certain that a well-regulated tax on profits would ultimately restore commodities, both of home and foreign manufacture, to the same money price which they bore before the tax was imposed." — *Ibid.*, chap. xiii, p. 283. (McCulloch's ed., chap. xv, p. 127.) Cf. chap. xvi, pp. 354, 355. (McCulloch's ed., chap. xviii, p. 155.)

² "It must therefore be conceded to Mr. Buchanan that any rise in the price of provisions occasioned by a deficient supply will not necessarily raise the money wages of labor. Taxes so far as they impair the net capital of the country diminish the demand for labor, and therefore it is a probable, but not a necessary, nor a peculiar consequence of a tax on wages, that though wages would rise, they would not rise by a sum precisely equal to the tax." — *Ibid.*, chap. xiv, pp. 288, 289, 297. (McCulloch's ed., chap. xvi, pp. 130, 133.) Yet in the very next paragraph he says that he agrees with Adam Smith.

³ "Taxes on wages will raise wages, and therefore will diminish the rate of the profits of stock . . . The only difference between a tax on necessities and a tax on wages is that the former will necessarily be accompanied by a rise in the price of necessities but the latter will not . . . A tax on wages is wholly a tax on profits, a tax on necessities is partly a tax on profits and partly a tax on rich consumers." — *Ibid.*, p. 285. (McCulloch's ed., p. 129.)

which is absurd.¹ Since the tax would, therefore, rest on profits, it is immaterial whether the taxes be levied on profits or on wages. It is always the profits of stock on which these taxes ultimately fall.

It will be readily seen that these teachings of Ricardo depend on the wage-fund theory, on his doctrine of profits, and on the law of economic rent. They stand or fall with the acceptance or rejection of his general theory of distribution. Two points, however, must be brought prominently forward—on the one hand, the difference between Adam Smith and Ricardo in results; on the other, the similarity in their methods.

Adam Smith, as we saw, holds that the landowners ultimately pay most of the taxes, bearing as they do all the taxes on land, and a great part of the taxes on wages and profits. The "rich consumers" pay a smaller part, and the lenders of capital still less. On the other hand, Ricardo maintains that the landowner pays only the taxes on rent proper, but shifts all the other taxes on land. Both Ricardo and Adam Smith agree that wages can never be reached by a tax; but Adam Smith regards the landowners, while Ricardo looks upon the recipients of profits of stock, as the real taxpayers of the country. The one may be called the unconscious advocate of the landed interest, the other of the moneyed interest.

But while they differ in result, they largely agree in method. What Roscher calls the "magnificent abstractions" of Ricardo are perhaps the more impressive. In his reasoning, no allowance is made for conditions or qualifications. The law of competition is assumed as perfect in its operations. The absolute transferability of capital and labor is presupposed. The most far-reaching hypotheses are posited,

¹ "If they could all raise the price of their goods so as to remunerate themselves with a profit for the tax: as they are all consumers of each other's commodities, it is obvious that the tax could never be paid; for who would be the contributors if all were compensated?" — *On the Principles of Political Economy and Taxation*, p. 303. (McCulloch's ed., p. 135.)

in the belief — or, at all events, with the resulting belief on the part of the unwary reader — that they are exemplifications of actual facts. Everything is reduced to its simplest form. The complicated questions of industrial society are treated as more or less plain arithmetical problems. Even though Ricardo's fundamental theory of distribution were correct, his doctrine of incidence would thus be incomplete. It might, perhaps, be true so far as it went, but it would even then not go far enough to explain actual phenomena. It fails to notice the practical effects of economic friction. However much we may marvel at his power of analysis, we instinctively regard his conclusions with some suspicion. Ricardo's doctrine of incidence is in some respects premature and inadequate. Because of its rigidity and unyielding abstraction, it may be called *par excellence* the absolute theory.

CHAPTER III

THE EQUAL-DIFFUSION THEORY

THE germ of this doctrine can be found in the work of a renowned Italian economist of the eighteenth century, Verri. He lays down the general principle that every tax naturally tends to bring about an equilibrium because it strikes every one according to his consumption.¹ If the tax is levied on land, the prices of agricultural products will rise; if on wares and manufactured commodities, the merchants and artisans will demand more; if on the working classes, they will necessarily exact higher wages. Thus taxes always have an expansive force; they tend to seek a level in a continually larger sphere. From this point of view it would appear to make no difference whether taxes were imposed on one class or on another.²

But, after proving to his satisfaction, in detail, that taxes tend "to diffuse and to equalize themselves on consumption" ³ Verri maintains that this ostensible law of indifference is not really defensible. For this equalization of the burden of taxation always involves a continual struggle — a state of war — or, as he puts it in another place, a condition of revolu-

¹ "Ogni tributo naturalmente tende a livellarsi uniformemente su tutti gl' individui di uno stato a proporzione delle consumazioni di ciascuno." — *Meditazione sulla Economia Politica*. Di Pietro Verri Milanese. 1771, p. xxx. Cf. Custodi's Collection of *Scrittori Classici Italiani di Economia Politica, Parte Moderna*, tomo xv, p. 244. Milan, 1804.

² "Così il tributo ha sempre una forza espansiva per cui tende a livellarsi sulla sfera più vasta che si può. Riguardato da questo canto solo, parebbe indifferente che ei cadesse più su di una classe d' uomini che su di un' altra." — *Ibid.*, p. 247.

³ "Chi più consuma più contribuisce al tributo; e il tributo, siccome dissi, si diffonde e congraglia sulle consumazioni." — *Ibid.*, p. 253.

tion, between individuals and classes.¹ When the tax is imposed in first instance on the rich and powerful, they can easily shift it to the poor and weak; but when the tax is assessed directly on the weak, the shifting and equalization will take place slowly and with all those delays and obstacles which occur when the poor try to get justice from the rich. These intervals, Verri concludes, between the impulse and the final repose form the most important crisis in national life, and are especially to be borne in mind in considering each transfer of taxation.² Verri accordingly is a strong advocate of the exemption of the poorer classes from taxation.

A few years even before Verri, the idea was advanced by an Englishman, Lord Mansfield. "I hold it to be true," said Mansfield, "that a tax laid in any place is like a pebble falling into and making a circle in a lake, till one circle produces and gives motion to another, and the whole circumference is agitated from the centre."³ Mansfield, however, made no further application of the doctrine. Several years later, Dickson⁴ described the process of the shifting of taxes, which he thought would result in a situation where all persons concerned would finally bear a just proportion of the increase of price due to the tax.⁵

¹ "Questo conguaglio e questa suddivisione del tributo è sempre uno stato di guerra fra ceto e ceto d' uomini." "Il tempo che trascorre fra la imposizione del tributo e il conguaglio, è un tempo di guerra e di rivoluzione." — *Ibid.*, pp. 253, 254.

² "Quando il possessore e il cittadino che ha fondi debbono anticipare il tributo, la suddivisione nel minuto popolo si fa sollecitamente e con poco ostacolo, perché egli è il potente che richiede ragione dal debole; ma quando il tributo immediatamente cada di primo slancio sulla classe del debole, la suddivisione si farà, ma con quella lentezza o con quegli ostacoli che debbon nascere quando il debole e povero cerca ragione dal ricco e potente. Questi intervalli fra l' impulso e la quiete sono le crisi più importanti negli stati, e sono ben da osservarsi in ogni cambiamento di tributo." — *Ibid.*, p. 254.

³ "Speech on Taxing the Colonies," 1766. In Lord Mansfield's *Collected Speeches*. Quoted by F. A. Walker, *The Wages Question*, p. 316.

⁴ *An Essay on the Causes of the Present High Price of Provisions as connected with Luxury, Currency, Taxes, and National Debt*. [By Adam Dickson.] London, 1773.

⁵ "In the payment of taxes, no man is a patriot; every person endeavors to

Another English writer of about the same date thought that a tax inevitably tends to raise the prices of all commodities, including those not taxed;¹ "for taxes, like the various streams which form a general inundation, by whatever channels they separately find admission, unite at last and overwhelm the whole."² Every one, therefore, really bears a part of the burden, even if the tax is not imposed upon him. In still another work, written toward the end of the eighteenth century by John Young, the same idea is expressed somewhat more fully.³ Young maintains that taxes not only

evade them, or to oblige others to reimburse him for what he pays. The first can only be done in a small degree, the last is the method commonly taken. When a tax is laid upon any manufacture, the manufacturer, in order to carry on trade to the same extent as formerly, must either borrow money for which he must pay interest, or he must purchase at a longer credit, which, with respect to his selling, is the same thing with purchasing at a higher price. He must, therefore, lay upon the commodities which he sells the interest of the money which he borrows, or the additional price which he pays for the materials which he manufactures. Besides this, he lays upon the price of these commodities the whole tax which he pays. This at least with all his address he endeavors to do. The persons that consume the commodities which he manufactures, finding the prices of these raised, instead of retrenching, which is commonly a disagreeable thing, endeavor in their turn to raise the prices of the commodities in which they deal. Thus, if the tax makes a very considerable difference, the prices are raised in a rotation, and at last come to the manufacturer where the rise began, who, in consequence of this, if in his power, begins another rise, which every person will endeavor to push around in the same manner, so that a heavy tax naturally raises the prices of commodities gradually, till such time as they are fixed in such a state as to make all persons concerned bear a just proportion of it." — *An Essay*, pp. 66-67. [By Adam Dickson.] London, 1773.

¹ "Besides this, every new tax does not only affect the price of the commodity on which it is laid, but that of all others, whether taxed or not, and with which, at first sight, it seems to have no manner of connection. Thus, for instance, a tax on candles must raise the price of a coat, or a pair of breeches; because, out of these, all the taxes on the candles of the wool-comber, weaver, and the tailor, must be paid: A duty upon ale must raise the price of shoes; because from them all the taxes upon ale drank by the tanner, leather-dresser, and shoe-maker, which is not a little, must be refunded." — *Thoughts on the Causes and Consequences of the Present High Price of Provisions*. London, 1767, pp. 4, 5.

² *Ibid.*, p. 5.

³ *Essays on the following Interesting Subjects: viz., I Government, II Revolution, etc., etc., VII Taxation, and VIII The Present War*. By John Young, D.D. Glasgow, 4th ed., 1794.

raise the price of the commodities taxed, but tend to lower the value of money, and thus to raise the prices of all other commodities. Ultimately, says he, they also increase wages. But laborers, providing they are willing to live on the produce of the country and be clad as their fathers were, in their own manufacture, "pay practically nothing to government and yet get higher wages." "Thus it appears," observes Young, "that though taxes newly imposed must be burdensome; because they take from the people so much of what was formerly their own; yet the longer they continue, they become the lighter: and, in process of time, they cease to be a burden at all."¹ "This may be thought a bold assertion," adds Young, "but it is capable of demonstration."²

Verri, as well as the English writers, however, seem to have passed unnoticed. The theory in its modern form really dates back to the celebrated book of Canard,³ which has now become so rare as to justify a somewhat fuller treatment.

Canard expounds his views in a work avowedly written to disprove the Physiocratic theory of incidence. According to him, there is not only a natural labor, — that is, labor necessary to sustain existence, — but also what he calls acquired labor, as well as superfluous labor. These three kinds of labor lay the foundation of all surpluses or rents. There are, therefore, three rents: *rente foncière*, the result of the fixed labor applied to land or industry; *rente industrielle*, the result of the *travail appris* in industry; and *rente mobilière*, the result of the *travail superflu* in commerce. The aim of every man is to turn his labor into that particular kind of occupation which will give him the greatest rent or surplus. From this mutual struggle results the system of "equilibrium of advantages," the laws of which are the explanation of all economic phenomena.⁴ The balance or equilibrium of these three rents is the foundation of the law of incidence.

¹ *Ibid.*, p. 128.

² *Ibid.*, p. 125.

³ *Principes d'Économie Politique. Ouvrage couronné par l'Institut National.* Par N. F. Canard. Paris, an X (1801).

All taxes, he continues, must be paid from one of these three rents, since a tax can never remain on the *travail naturel* which is necessary to existence. All taxes, again, are shifted because they disturb the equilibrium between the rents. Hence it makes no difference how a tax is imposed, whether on rent or on consumption. The incidence will always be the same; for a tax always diminishes the desire or "determination" of the buyer and seller, and no sale will take place until these desires are equalized by each party assuming one-half of the tax. This is the "equilibrium of the determination" to exchange. The first step in the shifting of taxes is then like this:¹—

$$\begin{array}{lcl}
 \text{Total tax} = T. & & \left\{ \begin{array}{l} \frac{1}{2} T \text{ is share of first seller.} \\ \frac{1}{4} T \text{ is share of second seller.} \\ \frac{1}{8} T \text{ is share of third seller.} \\ \frac{1}{16} T \text{ is share of fourth seller.} \\ \frac{1}{32} T, \text{ etc.} \end{array} \right. \\
 \text{Share of first buyer is } & \frac{1}{2} T & \left\{ \begin{array}{l} \frac{1}{4} T \text{ is share of second seller.} \\ \frac{1}{8} T \text{ is share of third seller.} \\ \frac{1}{16} T \text{ is share of fourth seller.} \\ \frac{1}{32} T, \text{ etc.} \end{array} \right. \\
 \text{Share of second buyer is } & \frac{1}{4} T & \left\{ \begin{array}{l} \frac{1}{8} T \text{ is share of third seller.} \\ \frac{1}{16} T \text{ is share of fourth seller.} \\ \frac{1}{32} T, \text{ etc.} \end{array} \right. \\
 \text{Share of third buyer is } & \frac{1}{8} T & \left\{ \begin{array}{l} \frac{1}{16} T \text{ is share of fourth seller.} \\ \frac{1}{32} T, \text{ etc.} \end{array} \right. \\
 \text{Share of fourth buyer is } & \frac{1}{16} T & \left\{ \begin{array}{l} \frac{1}{32} T, \text{ etc.} \end{array} \right.
 \end{array}$$

But this is, of course, only the first step. The first seller will immediately see that he is bearing one-half of the tax, while only one-quarter rests on the buyer. He will perceive that the buyer's "determination" to exchange is stronger than his, and will, therefore, refuse to sell. But if the buyer assumes an additional share of the tax, as he well can, he will for the same reasons shift a part of the tax to the next seller, and so on. There will be no equilibrium until each bears an equal share.

To understand how the burden of the tax is distributed between buyer and seller, Canard likens the system of circulation of goods to a series of communicating tubes. No matter how much water we pour in or out of any one tube, every one of the other tubes will gain or lose until the level is again reached in all. Just as the water will seek its level by distributing itself proportionally to the diameter of each tube, so every tax will be distributed equally between buyers

¹ *Principes d'Économie Politique*, p. 158.

and sellers according to their capacity to labor.¹ Hence it is useless for economists to devise schemes for taxing forms of business which seem not to be hit by any existing tax. It is, moreover, utterly futile for the banker or merchant to hide his books; for the taxation of any one branch of industry is like the operation of cupping. The vein from which the surgeon has taken the blood is not more bloodless after the operation than any of the other veins of the body. So it is with the profits of any branch of industry which are diminished by a tax; the profits of all other branches flow in at once, until the equilibrium is restored.² It may be said, in fact, that the burden of the tax finally disappears, and that the tax is ultimately borne by no one at all.³

Canard, however, confesses that it takes some time for this equilibrium to be realized. There will, he admits, be many

1 "Pour concevoir comment l'impôt se répartit sur tous les acheteurs-vendeurs, imaginons une suite de tubes se communiquant entr'eux; si dans l'un d'eux on verse un liquide quelconque, il s'écoulera successivement dans tous les tubes, et l'écoulement cessera lorsqu'il y sera de niveau. Alors le liquide sera réparti dans tous les tubes proportionnellement à leur diamètre, de même que l'impôt est réparti sur tous les acheteurs-vendeurs, proportionnellement à la capacité de leur travail."—*Ibid.*, p. 161. "Les lois d'équilibre, dans le système général de la circulation, sont les mêmes que les lois de l'équilibre des fluides."—*Ibid.*, p. 233.

2 "C'est donc bien vainement que les économistes s'épuisent en moyens pour chercher à atteindre par l'impôt les branches qui lui paraissent inaccessibles: l'impôt que l'on perçoit sur une branche d'industrie ressemble à la saignée que le chirurgien fait au bras; la veine qu'il a piquée n'est pas plus appauvrie du sang après l'opération, que toutes les autres parties du corps. Il en est de même du gain que l'impôt soutire d'une branche; le gain des autres branches vient tout-à-coup y affluer pour rétablir l'équilibre."—*Ibid.*, pp. 168, 169.

3 "On peut dire, à la rigueur, que la charge de l'impôt finit par être tout-à-fait nulle, et n'est supportée par aucun individu."—*Ibid.*, p. 178. In another passage Canard pictures the process as follows: "Ainsi, voici la marche que suit la charge de l'impôt: 1° elle s'écoule d'abord de celui qui le paie le premier sur tous les autres acheteurs-vendeurs et consommateurs de la même branche; 2° de là elle se répand de proche en proche sur toutes les autres branches, par la nouvelle concurrence qu'apportent ceux qui quittent les branches imposées, pour s'attacher à celles qui ne le sont pas; 3° enfin, cet excès de concurrence va se perdre dans la branche immense de l'effort politique alimentée par l'impôt, et dont la consommation dédommage les autres branches de la diminution de la consommation superflue qui en résulte. Alors la charge de l'impôt est entièrement de niveau, alors elle n'est plus sentie."—*Ibid.*, p. 180.

contests between buyers and sellers and many difficulties in the way. These difficulties he calls the "friction of taxation."¹ During this period of returning equilibrium, even the "natural labor," or the wages of the ordinary laborer, may be affected by the tax. Moreover, this period of friction produces serious fluctuations, which throw all business into confusion until the equilibrium is again reached. It is not so much the tax which causes the trouble, as the derangement of the equilibrium. Hence, concludes Canard, we may advance this great truth: "Every old tax is good, every new tax is bad."² A government which does not possess a fixed, invariable system of taxation is like the planter who is continually changing his methods, but whose land, in the meantime, produces nothing, until the owner himself is ruined.³ Every tax becomes good, provided it lasts long enough.⁴ Curiously enough, Canard's practical solution of the problem is found in the proposal to replace all existing taxes by a tax on salt.

The theory of Canard was accepted by several writers, notably by Courcelle-Seneuil and Cherbuliez in France, and by Prittwitz in Germany. Courcelle-Seneuil tells us that old taxes act exactly like climatic or agricultural disadvantages. Society is poorer, says he, than it would be if these disadvantages did not exist, but the disadvantages are spread over the whole community.⁵ Cherbuliez expresses the same

¹ "Cette difficulté, c'est ce que j'appellerai le frottement de l'impôt." — *Principes d'Économie Politique*, p. 181.

² "On voit donc que ce n'est pas l'impôt par lui même qui fait le mal, mais seulement le dérangement de l'équilibre qu'il cause. Donc on peut avancer cette grande vérité, que *tout vieil impôt est bon, et tout nouvel impôt est mauvais*." — *Ibid.*, p. 197.

³ "Un gouvernement qui n'a pas une manière fixe et invariable d'impositions, ressemble à un propriétaire qui, après avoir fait une plantation, s'en dégoûte, la change pour une autre, et celle-ci pour une autre encore; pendant ce temps la terre ne produit rien, et le propriétaire se ruine." — *Ibid.*, p. 198.

⁴ "Tout impôt ne devient bon que par sa vétusté." — *Ibid.*, p. 233. Cf. p. 202.

⁵ "Lorsque les impôts ont reçu la sanction du temps, ils ne touchent plus à la propriété d'aucun individu en particulier, parceque chacun a arrangé sa vie en vue de son existence. Ils agissent alors exactement comme les inconvénients du

idea, but in somewhat modified form, in saying that stability is the best quality of a tax system, as mobility is the worst. All taxes, he argues, no matter how bad at first, gradually become good.¹

The theory reached its final stage in the German writer Prittwitz, who maintained that the only way to secure a just and equitable distribution of taxes was through a permanent, immutable system, and that this would be equally true, even though the system were at its inception the most absurd and burdensome one imaginable.² It is for this reason that the theory may be called the "optimistic" theory.

The writer who may be said to share with Canard the doubtful honor of founding the optimistic theory is Thiers. He wrote quite independently of Canard, and is of especial importance as being the inventor of the term "diffusion" of taxes — a term which he borrows from the science of optics. He compares the shifting of taxes to the diffusion of the rays of light, and lays down his principle in the following words: "Taxes are shifted indefinitely, and tend to become a part of the prices of commodities, to such an extent that every one bears his share, not in proportion to what he pays to the state, but in proportion to what he consumes."³ The argu-

climat et du sol: la société en général est moins riche que si ces inconvénients n'existaient pas; mais cette diminution de richesse se trouve répartie de telle façon que toutes les forces mécaniques sont dans leur équilibre naturel." — *Traité théorique et pratique d'Économie Politique*. Par J. C. Courcelle-Seneuil. Paris, 1857. 2d ed., 1867, i, p. 462.

¹ "La stabilité est le mérite le plus essentiel, la mobilité le plus grave défaut que puisse avoir un régime pratique de fiscalité. Tout système d'impôts, quelque vicieux qu'il puisse être en théorie, au point de vue de la répartition, va s'améliorant en pratique avec les années, à mesure que les effets immédiats du prélèvement sont amortis et successivement effacés par l'action toujours graduelle, souvent très lente, mais invariable et certaine, des lois qui gouvernent la vie économique des sociétés." — *Précis de la Science Économique et de ses principales Applications*. Par A.-E. Cherbuliez. Paris, 1862, ii, p. 457.

² "Denkbar abenteuerlichste und drückendste" are the words. Cf. *Die Kunst reich zu werden, oder gemeinfaszliche Darstellung der Volkswirtschaft*. Von M. v. Prittwitz. Mannheim, 1840, pp. 515-522; and the same writer's *Theorie der Steuern und Zölle*, Stuttgart, 1842, pp. 107-116.

³ "L'impôt se répartit à l'infini, et tend à se confondre avec le prix des choses,

ments with which Thiers supports this thesis are as follows: The manufacturer who pays a tax, whether direct or indirect, adds the tax to the price of the commodity; for, consciously or not, he necessarily fixes the price so as to recompense him for all his outlays, plus a certain profit. Otherwise he would quit the business. The tax, then, is simply a part of the cost of production. This is true not only of the manufacturer, but of the farmer. If he is to remain in the occupation of agriculture, all his outlays must be made good. So, again, the laborer is in precisely the same situation; for unless his wages increase by the amount of the tax, he must change his occupation or die of hunger. Thus all taxes are indefinitely shifted.

When we remember that Thiers' whole work was written to prove the absolute rights of private property, we need not feel surprised at his conclusions. He tells us that, according to this most wise and reassuring law of providence, no matter what the government may do, it is always the rich who pay most of the taxes, because they consume the most.¹ To the socialists, he says: Hands off, do you not see that the rich already pay most of the taxes? To the radicals, who wish to restrict the province of indirect taxes because they bear heavily on the poor, he says: Stop, that is not true; the rich already pay more than their share.

The logical conclusion of what Thiers calls this "rigorously true" theory of incidence would undoubtedly be that it makes no difference what system of taxation is adopted. But, "God forbid that I should maintain such a heresy,"² cries Thiers, much to our surprise. He demands, in the first

au point que chacun en supporte sa part, non en raison de ce qu'il paye à l'État, mais en raison de ce qu'il consomme." — *De la Propriété*. Par M. A. Thiers. Paris, 1848, p. 381. Cf. "L'impôt se répercute à l'infini, et de répercussions en répercussions devient en définitive partie intégrante du prix des choses. C'est ce qui j'appelle la diffusion de l'impôt." — *Ibid.*, p. 382.

¹ "Par une loi des plus sages, des plus rassurantes de la Providence, de quelque façon que s'y prennent les gouvernements, le riche est après tout le plus soumis à l'impôt." — *Ibid.*, p. 389.

² "Dieu me préserve de soutenir une pareille hérésie."

place, equality of taxation, without attempting, however, to show in what this equality consists. Secondly, he makes the important concession that, although the tax is ultimately shifted, it is, for the time being, a burden on the first payer. But he at once complacently ignores these concessions and maintains that, in the long run, regardless of any act of the government, it is always the rich who pay the taxes.

It is to be noticed that this rather shallow doctrine of Thiers met with almost no success in France, where de Broglie is almost the only writer who has adopted it, in speaking of the "indefinite repercussion" of taxes.¹ It is remarkable, however, that it should have found adherents in other countries. The most noteworthy modern follower of Thiers is the Austrian professor, Stein, who goes so far as to declare the whole doctrine of shifting to be the result of a "marvellous confusion of thought." According to Stein, every tax is shifted by everybody on everybody, since everybody merely advances the tax for somebody else who uses his productions. From this theory logically follows that there is no need of a science of taxation. In place of the "confused doctrine" of the shifting of taxes, Stein propounded the "simple idea of the production of taxes," the idea that "the total amount of all taxes must be really produced every year as the surplus of production."²

Although this conception may be very "simple" to Stein, it must be confessed that even all subsequent German writers

¹ "Tout impôt tombe, en dernière analyse, sur le consommateur; tout impôt entre, comme élément intégrant, dans le prix des choses consommables." — *Le Libre Échange et l'Impôt. Études d'Économie Politique.* Par le Duc de Broglie. New ed. Paris, 1885, p. 48. The passage originally appeared in his monograph, *Les Impôts et les Emprunts*, published in 1849.

² *Lehrbuch der Finanzwissenschaft.* Von Dr. Lorenz von Stein. 4th ed. Leipzig, 1878, i, pp. 493-497: "Die Lehre von der Überwälzung der Steuern ist eine der wunderlichsten Begriffsverwirrungen, die es je in der Wissenschaft gegeben hat. . . . Das grosse Resultat ist das jede Steuer von jedem auf jeden überwältzt wird. . . . An die Stelle der unklaren Ueberwälzung der Steuern tritt der klare Begriff der Production derselben. . . . Die Gesamtsumme aller Steuern muss alljährlich als Mehrwerth der Production von dem Volke wirklich producirt werden. . . . Das ist der einfache Begriff der Steuerproduction."

have declared themselves unable to understand what it means. We may, therefore, be excused from attempting to unravel the mystery.

In England, we find during the nineteenth century comparatively few allusions to the theory. Martin summed up the doctrine in the following words: "The public are the persons on whom the taxes fall, no matter how they may be artfully diverged in their course."¹ A few years later an anonymous writer devoted a volume to an attempt to prove that all taxes whatsoever finally fall upon the consumer.² This writer was evidently Gibbon, for in a subsequent work he treats the subject in much the same way, and states the equal-diffusion theory in almost the same words by saying that "all taxes, direct or indirect, paid by the producers or importers of commodities, and by the dealers therein,—ultimately fall upon, and are paid by, the consumers, by whomsoever such taxes may have been paid to the collectors thereof, or into the public chest."³ Gibbon applied this rule to practically all taxes, for, according to him, taxes on land are taxes on the produce of the land, and,

The most recent attempts to understand, and at the same time to combat, Stein are found in the two Dutch works: Cort van der Linden, *Leerboek der Financiën*, 1887, § 81, pp. 156-162; and Pierson, *Leerboek der Staatshuishoudkunde*, 1890, ii, pp. 448-455.

¹ *Taxation of the British Empire*. By R. Montgomery Martin. London, 1833, p. 245.

² "All taxes, direct and indirect, paid by owners or occupiers of land; and all taxes paid by the dealers in the productions of land, on their way from the producer to the consumer—and all taxes whatsoever, paid by producers within the United Kingdom, and by importers of all commodities for home consumption, and by the dealers in all such commodities, on their way from such producer or importer to the consumer—as well as all taxes of Customs or of Excise imposed on such productions or commodities, by their measure or weight,—ultimately fall upon and are paid by the consumers of those productions or commodities,—by whomsoever such taxes may have been paid to the collectors thereof, or into the public chests."—*A Familiar Treatise on Taxation, Free Trade, etc., comprising Facts usually unnoticed or unconsidered in Theories of those Subjects*. London, 1846, p. 21. Cf. p. 46.

³ *Taxation: its Nature and Properties, with Remarks on the Incidence and the Expediency of the Repeal of the Income Tax*. By Alexander Gibbon, Esq. London, 1851, p. 18.

like taxes on profits or income taxes, fall in the end on the consumers."¹

In America, the few writers of prominence on the subject of taxation were, until recently, almost all followers of Thiers. America may, in fact, claim the honor of being the only country in the world where the doctrine is still upheld. The chief representative of this easy-going, complacent doctrine is David A. Wells. "Taxes equate and diffuse themselves," says he, "and if levied with certainty and uniformity they will, by a diffusion and repercussion, reach and burden all property with unerring certainty and equality. All taxation ultimately and necessarily falls on consumption."² The same opinion has been advanced by Isaac Sherman in the statement that "all proportional contributions to the state from direct competitors are diffused upon things and persons by a uniformity as manifest as is the pressure of water which is known to be uniform in all directions."³ Even Judge Cooley is not entirely free from a share in this opinion.⁴

President Walker was the first American economist to question the truth of the optimistic theory.⁵ He seems, however, to overlook the fact that this is only one among many theories of incidence, and that the problem of shifting cannot be solved simply by a negation of the equal-diffusion doctrine. It may also be mentioned that Alexander Hamilton, at the end of the eighteenth century, made an incidental allusion to the equal-diffusion theory, although the term

¹ *Ibid.*, pp. 19, 26, 33.

² Article "Taxation" in Lalor's *Cyclopædia of Political Science*, iii, p. 88. The editor of this cyclopædia makes the remarkable statement: "Mr. Wells' views are in harmony with those of Adam Smith, Ricardo, James Mill, Thiers, McCulloch and Say." A most remarkable jumble! — Cf. another statement of Mr. Wells' theory in the *Second Report of the New York Tax Commission*, 1872, p. 47, where he quotes Thiers approvingly.

³ *The Exclusive Taxation of Real Estate and the Franchises of a Few Specified Moneyed Corporations*. By Isaac Sherman. New York, 1874.

⁴ *A Treatise on the Law of Taxation*. By Thomas M. Cooley. Chicago, 1881, 2d ed., 1886, p. 38.

⁵ *Political Economy*. By Francis A. Walker. 3d ed. New York, 1888, §§ 606-610.

was, of course, not employed by him. Hamilton, however, was too great a statesman to be deluded by the specious advantages of a system of taxation based on this theory. He was careful to point out that the important thing is to distribute the burdens equitably at first, and not to rely upon the supposed automatic working of any such general principle.¹

The optimistic theory is so superficial that it scarcely deserves a refutation. The doctrine has never been accepted by any writers of importance, except the few already mentioned; and the weakness in the arguments advanced to support it has been shown a hundred times. It is needless to repeat these arguments here, as our review of the eclectic theories, as well as the whole positive and constructive part of the present monograph, will show the shallowness of the doctrine. Were the theory true, there would be no need for any investigation like the present.

What may be called the pessimistic theory is, like the optimistic theory, also based on the doctrine of diffusion; but it draws entirely different conclusions. Its chief apostle is the great anarchist, Proudhon. According to him, all taxes are, in last resort, taxes on the consumer. Try as the legislator may, he cannot prevent this shifting. The whole distinction between direct and indirect taxes, he concludes, is useless; and the result of such attempt at classification must always be "fiscal nonsense."² Since the mass of the consumers are poor, says he, all taxes are unjust, because they inevitably

¹ "Though it may be said that on the principle of a reciprocal influence of prices, whereon the taxes are laid in first instance, they will in the end be borne by all classes, yet it is of the greatest importance that no one should sink under the immediate pressure. The great art is to distribute the public burthens well, and not suffer them, either first or last, to fall too heavily on parts of the community, else distress and disorder must ensue; a shock given to any part of a political machine vibrates through the whole." — *The Continentalist*, No. 6, 1782. (*Works of Alexander Hamilton*, edited by Henry Cabot Lodge, i, p. 265.)

² "En résumé, de quelque manière qu'on s'y prenne avec l'impôt, on obtient zéro de résultat. C'est toujours la consommation qui le paye." . . . "Voici qui met le comble à la déraison fiscale. En dernière analyse, l'impôt est acquitté par la masse." — *Théorie de l'Impôt*. Par P. J. Proudhon. Paris, 1861. In new edition, *Œuvres Complètes*. Paris, 1868, vol. xv, pp. 206, 166.

press on the poor more than on the rich. This fact constitutes the inevitable iniquity of taxation :¹ taxation is necessary, and yet it is necessarily unjust. This is one of Proudhon's famous "contradictions économiques." "The problem of taxation is hence insoluble. The fault lies neither with the principle of proportion, nor with the revolution, nor with the government; neither with ideas nor with men; the fault is to be found in the institutions, which themselves depend on the nature of things."

Proudhon's pessimism is as superficial as Thiers' optimism. Each contents itself with words instead of arguments. Yet, however widely they diverge in practical results, the theories virtually agree in asserting that it really makes no difference what sort of taxes are imposed. In the light of such theories as these, the whole science of finance appears to be a needless product of jugglery and mystification.

A recent American writer, Albert S. Bolles, may also be regarded as an advocate of the pessimistic theory, although he would probably resent any statement that he had been influenced by Proudhon. In fact, he bases his pessimism on the uncertainty of the process of shifting. According to Mr. Bolles, "no uniform law or rule prevails or can possibly be established with respect to the transfer (of taxes.)." . . . "A tax which is fairly assessed on all property in the beginning proves a highly unjust tax in its operation. . . . Some are obliged to bear the whole burden, they can shift no part of it; others are more fortunate and shift a portion; others are engaged in such a business, or happily are owners of such property, that they can shift the whole, or nearly the whole burden." The whole system thus results in the greatest inequalities.²

¹ "L'iniquité de l'impôt ne vient donc pas de lui, elle a son principe dans ces transformations engrenées, dans cette oscillation universelle, dans ces inégalités organiques, qui sans cesse, par leur agitation incoercible, rejettent sur le produit, et conséquemment sur la masse des consommations, ce que l'impôt s'était efforcé de répartir entre les propriétés, les maisons, les industries, les capitaux, les loyers, etc." — *Ibid.*, p. 222.

² Report of A. S. Bolles in *Report of the Revenue Commission appointed by*

It is true that Mr. Bolles applies his doctrine only to the general property tax. But the reasoning is equally applicable to other taxes; for in the matter of incidence there is very little difference, as we shall see, between a tax on property and one on profits. Almost all taxes may be considered, in one sense, taxes on profits. If it were true that a uniform tax always results in gross inequalities, the outlook for just taxation would indeed be poor. But, as will appear, it is an exaggeration to say that "uniform rules cannot be established." Pessimism we shall find to be as untenable as optimism.

the Act of the Legislature of Pennsylvania, May 25, 1889. Philadelphia, 1890, p. 142.

CHAPTER IV

THE CAPITALIZATION OR AMORTIZATION THEORY

THE origin of this theory is connected with the discussion of the land tax. To the extent that a land tax falls exclusively on the landowner, it was observed that the effect is to lower the value of the land by the capitalized value of the tax. In other words, since the value of land is fixed by its net produce, a tax which operates to decrease this net produce diminishes the value of the land by an amount equal to the capitalized value of the tax. The individual who purchases such land will pay for it only this diminished value. He will therefore be free of taxes, since he has discounted the tax by paying a smaller price for the land. The tax, in short, becomes a perpetual rent charge, allowance for which is made in any transfer of the property. From this argument the conclusion is drawn that a tax on land, after its first imposition, is borne by no one, since it is paid once and for all, and is then immediately shifted off in a capitalization of the tax. It is therefore entirely immaterial how low or how high the rate is, provided it be constant. This is known as the capitalization or amortization theory, according as we look to the increase or the diminution of the capital value. Applied especially to land, it is also known as the rent-charge theory, because the taxes are assumed to cease to be taxes on the owner, and to become rent charges in favor of the state.

The germ of this doctrine may be found in the work of some of the English writers of the eighteenth century. As far back as 1733, a pamphleteer of the excise controversy made an incidental allusion to the point. Speaking of the effect of a land tax, he says: "As for those who are late

Purchasers, they have little Reason to complain, since they came in upon the Foot of the Tax, and have often had Allowance made them for it in the Purchase.”¹ The author, however, draws no conclusions from this principle. At a considerably later period, John Young developed the same point independently in an interesting passage intended to reënforce his general argument² that the weight of taxes is not so burdensome as is generally believed. Young maintained that when a man bought a piece of land subject to a land tax, what he really purchased was the value of the land less the capitalized value of the tax, which belonged not to him, but to the government.³

The writers of the Physiocratic school in France, especially Turgot and Baudeau, also called attention to this phenomenon.⁴ But the theory was without much influence until after the beginning of the nineteenth century.

The earliest of the nineteenth century writers to discuss this problem, and in some respects the most interesting, was John Craig. This author, who has hitherto been singularly neglected, is worthy of notice as, until very recently, the only English writer to devote a separate volume to questions of public finance. He makes use of the argument advanced

¹ *The Nature of the Present Excise, and the Consequences of its Farther Extension examined.* In a Letter to a Member of Parliament. London, 1733, p. 38.

² See above, p. 125.

³ “Let the land tax be an instance. Suppose it fixed at a real two shillings in the pound, and rendered permanent. In that case, when a man buys an estate he knows what it must pay to Government; he buys it with that burden upon it, and the price is diminished accordingly. It is plain that if it is worth twenty-seven years’ purchase with that burden, it would be worth thirty without it. One-tenth of every estate really belongs to Government; this he does not purchase, but only the nine parts that belonged to the former proprietor. The same is the case with him that succeeds to it as his father’s heir. He is heir only to the nine parts that were his father’s; Government is not dead, and therefore continues to inherit its own tenth part. The only burden, therefore, that lies upon the proprietor of the estate is that of gathering in the two shillings of yearly rent that belongs to Government, along with his own eighteen, and paying it in to the collector of the land tax.” — *Essays on the Following Interesting Subjects*, etc. By John Young, D.D. 4th ed., Glasgow, 1794, p. 125. See above, p. 124.

⁴ See above, pp. 106, 107.

above, and tells us that the tax is "altogether paid by the present proprietors to the entire exemption of future purchasers."¹ But he limits the statement with an important condition, to be discussed in a moment, inattention to which has led succeeding authors to somewhat absurd results.

Some of the early German writers on public finance, such as Sartorius, Hoffmann and Murhard, went so far as to declare that, because of this capitalization, a land tax is no tax at all. Since it acts as a rent charge capitalized in the decreased value of the land,² they argue, a land tax involves a confiscation of the property of the original owner. On the other hand, since the future possessors would otherwise go scot free, it becomes necessary to levy some other kind of a tax on them.³

In France we find the theory expressed in part by J.-B. Say, although he does not draw the same conclusions.⁴ The

¹ "As the free rent of land will be diminished by the tax, the price of each estate will proportionally decline. If the nett rent be reduced by a tax of 4 sh. in the pound, from £100 to £80 a year, the estate which was formerly worth £3,000 will no longer sell for more than £2,400. A proprietor therefore, who wishes to dispose of his land, will at once be deprived of one-fifth of his property. Instead of paying £20 a year during his possession, and leaving this annual payment as a burden on the lands, he finds himself obliged to pay £600 the value of the tax forever, while his successor is exempted from all contribution." — *Elements of Political Science*. By John Craig, Esq. Edinburgh, 1814, vol. iii, p. 38.

² The Germans call the rent-charge theory "Die Reallast-theorie der Grundsteuer."

³ "Alle und jede fixirte Grundsteuern müssen sonach im Fortgange der Zeit und im Verkehre mit Grundstücken die Natur der Steuern gänzlich verlieren und sich in Staatsrenten verwandeln." — *Theorie und Politik der Besteuerung*. Von Dr. Karl Murhard. Göttingen, 1834, p. 295. Cf. p. 327. For the necessity of laying new taxes on future holders see *ibid.*, p. 366. Cf. similar passages in *Die Lehre von den Steuern als Anleitung zu gründlichen Urtheilen über das Steuerwesen*. Vorgetragen von J. G. Hoffmann. Berlin, 1840, p. 110. See also *Ueber die gleiche Besteuerung des Königsreichs Hannover*. Von Georg Friedrich Sartorius. Göttingen, 1815, p. 92. See also *Theorie der Steuern und Zölle*. Von Moriz v. Prittwitz. Stuttgart, 1842, p. 132.

⁴ *Traité d'Économie Politique ou simple Exposition de la Manière dont se forment, se distribuent et se consomment les Richesses*. Par Jean-Baptiste Say. Paris, 1802, book iii, chap. x; 8th ed., 1876, p. 565: "Le propriétaire ne peut, même par la vente de son fonds, se soustraire au fardeau de l'impôt: car le fonds n'est payé en principal qu'en proportion de ce que l'impôt lui laisse valoir en

doctrine is most clearly expounded, however, in the work of Destutt de Tracy, who makes the "singular and important observation" that when a tax is laid on land, a value equal to the capital of the tax is at once taken from the actual proprietors, and that when all have changed owners, it is really no longer paid by any one. It is worthy of note that Tracy applies his doctrine, also, to taxes on houses and on annuities.¹ Several decades later the capitalization theory was most elaborately defended by Passy, who has often, but erroneously, been deemed the real founder of the doctrine. Since his time the doctrine has generally been known in France as the theory of the immutability of the land tax (*Théorie de la fixité de l'impôt*). Passy drew the logical conclusion that the rate of the tax ought never to be changed. To increase it would be to confiscate the property; to reduce it would be to make a free gift of the capitalized value of the tax to the landowner.² The theory has been accepted by several other French economists. Thus, Garnier maintains that a tax on land is really an expropriation of the original

revenu. . . . C'est comme si le gouvernement prenait un cinquième de la terre." In a work subsequently published by Craig, *Remarks on Some Fundamental Doctrines in Political Economy*, Edinburgh, 1821, he calls attention to the fact that Say entertained many of his views on taxation, although neither had seen the work of the other.

¹ *Eléments d'Idéologie*. Par Comte A. L. C. Destutt de Tracy. Paris, 1804. This was reprinted in 1823 under the title of *Traité d'Économie Politique*. Cf. the American translation by Thomas Jefferson, under the title *A Treatise on Political Economy*. By the Count Destutt Tracy. Translated from the unpublished French Original. Georgetown, D.C., 1817, pp. 207-210.

² "Une remarque essentielle, en ce qui concerne l'impôt territorial, c'est qu'il finit par ne plus être constitué à titre véritablement onéreux pour ceux qui l'acquittent. Cet effet résulte des transmissions dont la terre est l'objet. . . . On ne peut élever le taux de l'impôt sans ravir aux propriétaires non seulement une portion des revenus dont ils jouissent, mais encore du capital même du nouveau tribut annuel mis à leur charge. On ne peut, au contraire, abaisser ce taux sans leur faire don d'une rente appartenant à l'état, et en même temps du capital de cette même rente." — Hippolyte Passy, article "Impôt" in *Dictionnaire de l'Économie Politique*, Paris, 1852, p. 902. Denis, *L'Impôt*, 1889, 161, errs in ascribing the origin of the doctrine to Passy. Pantaleoni, *Teoria della Trasmissione dei Tributi*, 1882, p. 173, seems to make the same mistake.

owner, to the manifest advantage of the future proprietors.¹ We find the same ideas in Wolowski, Du Puynode, Cherbuliez and Walras.² The real weakness of their arguments has, moreover, not been perceived by subsequent French writers. Parieu, who was himself not very clear on the general subject, shows merely that the doctrine of immutability necessarily leads to the English idea of the redeemable rent charge.³ Even Leroy-Beaulieu, although he terms it a "remarkably ingenious theory, with all the appearance of great scientific precision," simply objects that it is "much too absolute," without going to the pith of the controversy.⁴ The doctrine itself probably attained its extreme form in the statement of the Austrian economist, Stein, that this question is the most important in the whole domain of taxation, and that the land tax ought never to be increased.⁵

In England the theory has seemed to derive some support from the fact that the land tax is indeed a redeemable rent

¹ "Un impôt foncier, quand on l'établit, est une sorte d'expropriation du propriétaire pour une certaine partie de son fonds; mais l'acheteur qui lui succède paye la terre en conséquence et ne subit plus l'impôt." — *Les Éléments des Finances*. Par Joseph Garnier. Paris, 1858. 4th ed., 1885, under title of *Traité de Finances*, pp. 100, 103.

² "Tout accroissement de l'impôt direct sur la propriété ne porte que le nom d'impôt: il est en réalité une confiscation partielle déguisée sous une apparence trompeuse." — Wolowski, in the *Journal des Economistes*, 1866, iv, p. 141. Cf. *De la Monnaie, du Crédit, et de l'Impôt*. Par Gustave du Puynode. Paris, 1853, ii, p. 171. See also *Précis de la Science Économique, et de ses Principales Applications*. Par A.-E. Cherbuliez. Paris, 1862, ii, p. 437. See also *Éléments d'Économie Politique Pure, ou Théorie de la Richesse Sociale*. Par Léon Walras. 3d ed., Lausanne, 1896, pp. 452-454; and the same author's earlier work, *Théorie Critique de l'Impôt*, 1861, p. 34.

³ "Cette immutabilité n'est même que la timide prémisse de sa rachetabilité." — *Traité des Impôts considérés sous le Rapport Historique, Économique et Politique*. Par M. Esquirol de Parieu. Paris, 1862. 2d ed., 1866, i, p. 273.

⁴ *Traité de la Science des Finances*. Par Paul Leroy-Beaulieu. Paris, 1876. 5th ed., 1892, i, p. 319.

⁵ "Im Allgemeinen ist nun kein Zweifel, dass eine solche Erhöhung im ganzen Gebiete der Besteuerung die ernsteste und wichtigste Frage ist welche überhaupt hier vorkommen kann . . . Das allgemeine Princip daher muss sein . . . dass die Grundsteuer niemals erhöht werden darf." — *Lehrbuch der Finanzwissenschaft*. Von Lorenz von Stein. 4th ed., 1878, ii, p. 55. In the 5th ed., 1886, this passage is omitted. Cf. ii, pp. 103-105.

charge. This, however, is owing to the peculiar circumstances of the case. The English land tax, which was originally a general property tax, came to be considered a fixed and invariable tax of four shillings in the pound. In 1798 it was made perpetual at that rate, and the landowners were given the privilege of redeeming it, that is, to free the land from taxation by paying a certain lump sum by way of composition. In England, therefore, the land tax is a redeemable rent charge only because expressly made so by statute. This is what led Gregg to maintain that the land tax was not a burden upon the land, because the state had become a permanent proprietor jointly with the owner of the estate. It also led Senior to express the same views in distinguishing between the incidence of a new tax and that of a fixed permanent land tax.¹ To draw any general conclusions as to the incidence of taxation in general from these peculiar conditions would, however, be inadmissible. The inference that it is always wrong to impose a new tax or to increase an old tax on land would be especially unjustifiable. The truth of the matter is that the whole theory applies to the land tax only where it is the sole tax levied. Furthermore, it is not at all peculiar to the land tax.

The truth of the latter part of this statement was already recognized in the eighteenth century by Young, who contended that the argument as to land taxes is equally applicable to "the house tax, the window tax, and all others that affect heritable property."² A step further, however, was taken by Craig—a fact that seems to have escaped the attention of succeeding economists; for he expressly tells us that his theory holds good only in case "a land tax be imposed without an equivalent duty on every other species of property." Craig further contends that exclusive taxes in general, like exclusive taxes on land, fall ultimately on the present proprietors of that species of property which is

¹ *Select Committee of the House of Lords on the Land Tax*. London, 1846, qu. 5379-5510.

² *Essays*, etc. By John Young. 1794, p. 125. For full title, see above, p. 124.

taxed.¹ John Stuart Mill entertained practically the same opinion, although he did not work out his theory, but contented himself with asserting that a "peculiar tax on the income of any class, not balanced by taxes on other classes, is a violation of justice, and amounts to a partial confiscation."²

The other English writers have had little to say about the theory. Dudley Baxter, however, discusses the "strange theory" of the rent charge, as applied to the land tax, the poor rate and the succession, probate and legacy duties. Although he professes to discover three fallacies in the argument, none of his objections really goes to the root of the matter.³ Noble, in his chapter which deals solely with the broad facts of incidence, mentions the rent-charge theory only in connection with the land tax.⁴ Professor Sidgwick, who sees that the rent-charge theory applies only to a special tax on land, restricts the doctrine to "any particular kind of durable wealth, of which the supply is absolutely limited." But even he fails to recognize the real scope of the theory.⁵

The only French writer, in addition to Destutt de Tracy,

¹ *Elements of Political Science*, iii, pp. 37, 82-86.

² *Principles of Political Economy*, book v, chap. iii, § 2. In another passage he shows that an exclusive tax on "realized property . . . would fall exclusively on those who happened to compose the class when the tax is laid on. . . . Future buyers would acquire land and securities at a reduction of the price equivalent to the peculiar tax, which tax they would therefore escape from paying, while the original possessors would remain burthened with it even after parting with the property. . . . Its imposition would thus be tantamount to the confiscation for public uses of a percentage of their property." — *Ibid.*, book v, chap. i, § 3.

³ *The Taxation of the United Kingdom*. By R. Dudley Baxter, M.A. London, 1869, pp. 50-55.

⁴ *National Finance: A Review of the Policy of the last two Parliaments, and of the Results of modern fiscal Legislation*. By John Noble. London, 1875, pp. 282. Cf. the same author's *The Queen's Taxes: An Inquiry into the Amount, Incidence, and Economic Results of the Taxation of the United Kingdom*. London, 1870, p. 146.

⁵ *The Principles of Political Economy*. By Henry Sidgwick. London, 1883, p. 569.

who attempted to generalize the conception of the capitalization of incidence was Cournot. He expounded the theory at an early period, although in other words. Above all, Cournot applied it only to articles subject to the law of monopoly;¹ he drew no general conclusions from the theory.

It was reserved for the German economists to give to the capitalization theory a more adequate presentation. The earliest writer to discuss it more fully was Rau, who showed that the theory was not entirely true of the land tax. In the first place, says he, the original owners or their heirs often retain possession, so that there may be no chance for a diminution of the capital value through purchase and sale. Secondly, the value of land, he thinks, is fixed not alone by the net produce, but sometimes by other factors, such as a change in the demand or in the rate of interest. In such a case, it cannot be said that the new purchaser does not feel the tax, because it is difficult for him to realize clearly that he paid less for the land on account of the tax. So far as the theory is true, it applies only to so much of the land tax as exceeds the usual rate of taxes on other commodities. Above all, he concludes, the same argument is applicable to every tax levied on objects of varying value capable of sale—whether houses, stocks, bonds, or other capital.²

Other writers, such as Helferich and Hock, developed the doctrine,³ and it has recently been clearly expounded by

¹ "On peut même dire que cet impôt [fixed or proportional to net profits] ne fait tort qu'aux premiers possesseurs, aux inventeurs et en général à ceux qui jouissaient du fonds productif au moment de l'établissement de l'impôt, et à leur successeurs à titre gratuit. Car les successeurs à titre onéreux règlent leur prix d'acquisition sur le produit net, défalcation faite de l'impôt; et si le fonds vient à être dégrevé entre leurs mains, c'est pour eux une véritable épave." — *Récherches sur les Principes Mathématiques de la Théorie des Richesses*. Par Augustin Cournot. Paris, 1838, p. 75.

² *Grundsätze der Finanzwissenschaft*. Von Karl Heinrich Rau. Heidelberg, 1832. 5th ed., 1865, ii, pp. 22-27.

³ "Ueber die Einführung einer Kapitalsteuer in Baden." Von Johann A. R. von Helferich. In *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, 1846, pp. 291 *et seq.* Cf. *Die öffentlichen Abgaben und Schulden*. Von Dr. Carl Freiherrn von Hock. Stuttgart, 1863, pp. 111 *et seq.*

Schäffle.¹ The latter would naturally be expected to enlarge the rent-charge doctrine into a general theory of capitalization, because of his doctrine of the universality of the rent principle — the doctrine lately made familiar to English readers, which asserts that the theory of rent is not confined to land but is applicable to profits as well.² Since Schäffle emphasized this doctrine, the capitalization theory has been accepted by Pantaleoni³ in Italy, and by Pierson⁴ in Holland. But they all fail to notice some of the qualifications which will be mentioned in the second part of this inquiry. We have been concerned here merely with the history of the idea. The doctrine itself, in its modern form, constitutes a part of the general theory of incidence to be discussed hereafter.⁵

¹ Schäffle, in the book quoted in the next note, and also in *Die Steuern, Allgemeiner Theil*. Leipzig, 1895, § 212.

² Schäffle, *Die Grundsätze der Steuerpolitik und die schwebenden Finanzfragen*. Von Dr. Albert E. Fr. Schäffle. Tübingen, 1880, pp. 176, 187, 190. Schäffle's general theory of rent and profits was first published in 1867, in his *National-ökonomische Theorie der ausschliessenden Absatzverhältnisse*. The theory was outlined as early as 1855 by Mangoldt in his *Die Lehre vom Unternehmervergewinn*.

³ Pantaleoni, *Traslazione dei Tributi*, p. 179, chides Schäffle for not giving credit to Rau. But he seems to forget that Craig preceded both Rau and Schäffle.

⁴ *Leerboek der Staatshuishoudkunde*. Door Mr. N. G. Pierson. Haarlem, 1890, ii, pp. 391-409: "Amortisatie van Belastingen."

⁵ See below, part ii, chap. i, sec. 1.

CHAPTER V

THE ECLECTIC THEORY

THE absolute theory, as well as the equal-diffusion theory, soon met with considerable opposition. Most of the opponents, however, have confined themselves to criticism and to the elaboration of a few special points. Their doctrines may be summed up under the head of the eclectic school.

One of the first who attempted to show the weakness of both Canard and Ricardo was J.-B. Say. According to him, a tax on any article, when followed by a rise in price, falls on the consumer only in part; for increased price means diminished consumption, and smaller demand means lower profits. Thus, even here, he concludes, the producer will bear a part of the tax. The tax is like the powder that affects both the ball which it propels and the cannon which it causes to recoil.¹ Its effects are not felt wholly by the consumer—it never increases price by the full amount of the tax.

When the price of the article does not rise, Say continues, the producer bears the whole tax. But everything depends on whether the article is a necessary or a luxury. If the tax is levied on raw materials, for example, it affects more or less the prices of all other products. Direct taxes on producers, in the same way, affect consumers very unequally. As the doctrine of the transferability of capital is far more true of circulating than of fixed capital or of land, there is no such thing as an equality of profits; and therefore the producers of some commodities can shift the burden more easily than

¹ "C'est l'effort de la poudre qui agit à la fois sur le boulet qu'elle chasse et sur le canon qu'elle fait reculer."—*Traité d'Économie Politique*. Par J.-B. Say. Paris, 1802, book iii, chap. x; 8th ed., 1876, p. 562.

others. Moreover, Canard's analogy between the imposition of taxes and the cupping of the arm is misleading; for the wealth of society is not a fluid seeking its own level. It may rather be likened to a tree, one of whose branches may be killed without mortally wounding the tree; although the richer the branch, the greater the danger to the whole tree. But an analogy, however good, is not a proof. Hence, concludes Say, it is rash to affirm that a particular tax falls definitely on a certain class. Taxes fall, varying with the tax or with the state of the market, on those who cannot escape them; but the methods of escape are numberless. Nothing is more uncertain, nothing more variable, than the incidence of taxation.¹ The writers of the abstract school reason on assumptions to which the every-day facts give the lie.

On the other hand, Say immediately follows this statement with the assertion that a landowner can never shift a tax to the consumers — a statement which seems to be quite as absolute as those against which he directs his arguments. The land tax, he argues, will remain on the landowner, because the tax cannot normally affect the products; and, since the supply does not change, the price cannot. But still, Say concludes, it is impossible to lay down any detailed principles of incidence. In a machine so complicated as that of society, taxes are paid in many an elusive form.²

Another vigorous opponent of Ricardo was Sismondi. Sismondi starts out by asserting that in the case of taxes on arti-

¹ "On voit combien il est téméraire d'affirmer comme un principe général que tout impôt tombe définitivement sur telle classe de la société, ou sur telle autre. Les impôts tombent sur ceux qui ne peuvent pas s'y soustraire . . . mais les moyens de s'y soustraire varient à l'infini. . . . Rien n'est plus incertain, rien n'est plus variable que les proportions suivant lesquelles les diverses classes de la société supportent l'impôt." — *Ibid.*, p. 566. It is remarkable that Say has usually been regarded by English and American writers as an exponent of the equal-diffusion theory. In reality, he was one of its chief opponents. President Walker had already called attention to this fact. See his *Political Economy*, 3d ed., § 608.

² "Dans une machine sociale un peu compliquée, l'impôt s'acquitte sous bien des formes inaperçues." — *Ibid.*, p. 562, note.

cles of consumption, one can never say beforehand by whom they will be borne, because of the complexity of the conditions of the market. He discusses the "abstractions" of Ricardo, and especially his theory of taxes on raw produce and wages. Sismondi fulminates eloquently against the doctrines of the absolute equality of wages and of profits, and of the complete transferability of labor and capital—the corner-stone of Ricardo's theory. "What!" asks Sismondi, "are the farmers to become lawyers, or doctors, or clockmakers because their wages have been reduced? Will the laborers with horny hands and robust bodies all leave their fields and shut themselves up in the factories until agricultural wages have again risen? Beware of this dangerous theory of equilibrium. Beware of thinking it a matter of indifference where the burden is put. Beware of believing that if we tax necessities of life, the poor will shift the burden on to the rich: A certain equilibrium will indeed be attained in the long run, but after the most frightful sufferings. Before it is established, the failures of the merchants, who must abandon their industry, will have caused the nation more loss than all the revenue from taxation; the misery and suffering of the laborers will have cost the nation more lives than the most destructive wars. These are the terrible methods of reëstablishing the equilibrium. It is this that we see when we abandon those abstractions which never ought to befog a science that deals with the happiness and welfare of men." In such strong language does Sismondi endeavor to combat the theories of the absolute school.¹ But, while Sismondi is so heated in his

¹ "Quoi! les cultivateurs se feront-ils avocats ou médecins, ou bien horlogers ou mécaniciens, parce que leurs salaires ne leur suffisent plus pour vivre? . . . Les laboureurs, dont le corps est accoutumé au grand air, dont les mains endurcies sont rendues incapables de toute opération délicate, dont la santé requiert un exercice violent, dont l'âme a besoin des jouissances des champs, s'enfermeront-ils dans une filature de coton? Quoi! enfin, parce qu'un impôt sur les farines ferait monter le pain de 4 à 6 sous la livre, les laboureurs quitteraient les champs pour venir s'enfermer dans les villes, jusqu'à ce que le salaire des ouvriers des champs fût porté plus haut? . . . Gardons-nous de la dangereuse théorie de cet équilibre qui se rétablit de lui-même! Gardons-nous de croire qu'il soit indifférent dans quel bassin de la balance on met ou l'on ôte un poids, parce que les autres

criticism, he does not attempt any constructive work; he even goes so far as to say that he is unable to discover any general principles.

Another French writer who treated the subject, but in a manner less profound than some of his successors, is Garnier, who contends that, in the long run, taxes finally fall on the consumer. He maintains, however, that there are many limitations which prevent the producer from always shifting the burden to the consumer. Above all, he denies that the diffusion of taxes leads to an exemption of the taxpayers: "division, diffusion, and repercussion are unfortunately not the synonyms of evaporation."¹

A more important writer is Parieu. This writer's terminology is confusing; he continually confounds the words "incidence" and "shifting," and speaks of direct and indirect incidence. His matter, however, is far better than his form of presentation. Parieu criticises those who maintain that all taxes are added to the cost of production, and thus distributed to the consumers. This theory is false, and much exaggerated, cries Parieu. If the argument were sound, it would not be worth while to write any books on taxation, or to devote any

ne tarderont pas à se compenser! Gardons-nous de croire qu'en chargeant d'un impôt les objets de première nécessité, si les pauvres en font l'avance, les riches finiront par le rembourser! Un certain équilibre se rétablit, il est vrai, à la longue, mais c'est par une effroyable souffrance. . . . Mais, avant que cet équilibre soit rétabli, la faillite de tous les négociants, dans les branches d'industrie qu'il faudrait abandonner, aurait enlevé à la nation beaucoup plus de capitaux, en pure perte, que l'impôt n'aurait rapporté de revenus au fisc. De même la mortalité parmi les ouvriers qui ne trouvent plus de gagne-pain, aurait enlevé à la nation plus de vies que la plus désastreuse campagne. C'est par ces moyens terribles que la balance politique se relève; et, lorsqu'on descend des abstractions, où il ne faut jamais envelopper une science qui décide du bonheur et de la vie des hommes, c'est ainsi que s'opère le redressement." — *Nouveaux Principes d'Économie Politique, ou de la Richesse dans ses Rapports avec la Population*. Par J. C. L. Simonde de Sismondi. Paris, 1819, book vi, chap. 6; 2d ed., Paris, 1827, ii, pp. 219-223.

¹ *Traité de Finances*. Par Joseph Garnier. Paris, 1858; 4th ed., 1883, p. 26. Garnier errs, however, in ascribing this theory to Ricardo. It was the theory of Canard and Thiers, not of Ricardo. It is remarkable that Canard has been almost completely neglected by the French writers themselves.

thought to the matter; for, as all taxes would be alike in their results, there would be no choice between them. Parieu maintains, however, that it is possible to lay down one or two general principles, which he formulates in this way: Taxes remain in the first instance on the original taxpayer, if the taxable commodity is not susceptible of restriction of supply. In proportion as the supply can be diminished, the tax will be shifted to other classes. If the individual on whom the tax has been shifted is, in his turn, in a position to restrict his enjoyments, he will neutralize in part the effect of this shifting, and will shift the tax either back to the original taxpayer or on to some other class.¹

This leading principle Parieu applies to the various kinds of taxes. There is no doubt that he here strikes the keynote of what may be called the quantitative or mathematical theory, which will be discussed later on. What Parieu says is true, as far as it goes, and, rightly interpreted, furnishes a clue to many of the difficulties of the subject; but Parieu devotes only a few pages to the whole topic and makes no effort to get beyond vague generalizations. He concludes that, as a general rule, "the imposition of taxes, except in the case of taxes on commodities levied wholesale on the producer, cannot be regarded as producing a shifting which completely inverts the first natural effects of the tax. In most cases, the whole or the greater part of the tax remains on him who pays it actually or ostensibly in the first or second degree of the incidence."² Although he did not

¹ "L'impôt reste, au moins immédiatement, à la charge de celui qui le paye, si l'objet sur lequel il est assis n'est pas susceptible de restriction. Il est rejeté en tout ou partie sur d'autres contribuables, si l'objet sur lequel il est assis est susceptible de restriction, et la répercussion de l'impôt est en raison même de la facilité de cette restriction. Si celui sur lequel l'impôt est réfléchi est à son tour en état de reserrer la jouissance à l'occasion de laquelle il reçoit le contre-coup de la taxe, il neutralisera en partie l'effet de la répercussion de l'impôt en la rejetant, soit sur le contribuable primitif, soit sur d'autres." — *Traité des Impôts, considérés sous le Rapport Historique, Economique et Politique*. Par M. Esquirou de Parieu. Paris, 1862; 2d ed., 1866, i, p. 68.

² "L'incidence des taxes ne peut être considérée comme réalisant, si ce n'est pour les denrées frappées en gros chez les producteurs, une réflexion complètement

grasp the whole subject, and did not even develop his own principle successfully, Parieu deserves more than a passing notice as pointing out one of the most important elements in the solution of the problem.

The other French writers have not contributed materially to the solution of the problem. Thus, the work of Du Puynode is voluminous but not very critical. He makes the whole subject extremely simple. According to his theory, taxes on land as well as those on houses are ordinarily borne by the owners: "all the imaginary distinctions of Smith and Ricardo are without foundation."¹ Taxes on personal property or profits, he contends, are always shifted to the consumer; while taxes on wages always rest on the laborer by whom they are paid in first instance.² It is easy, of course, to solve the problems in this way.

The volumes of Vignes are important in the study of many other aspects of taxation, but his treatment of incidence is not especially noteworthy, except for the fact that he opposes both the theory of "scepticism" and that of "equal diffusion."³ He deals, however, mainly with special taxes, and does not seem well acquainted with the literature. Some of his views are interesting and will be noticed later.

Finally, Leroy-Beaulieu, in his comprehensive treatise on public finance, skims over the general problem. We do, indeed, find a few strong passages scattered through the volume, but only in connection with special points.⁴ While admitting that there is a certain element of truth in the

déstructive, des premiers effets naturels de l'imposition. Dans la plupart des cas, tout ou partie de la charge reste réellement imposée sur celui qui supporte visiblement et ostensiblement dans le premier ou le second degré de son incidence." — *Ibid.*, p. 83.

¹ *De la Monnaie, du Crédit et de l'Impôt*. Par Gustave du Puynode. Paris, 1853, ii, p. 175.

² *Ibid.*, ii, pp. 215, 321, 365.

³ *Traité des Impôts en France*. Par M. Edouard Vignes. 4th ed., by Vergniaud. Paris, 1880, ii, pp. 68, 97, 118, and 173.

⁴ *Traité de la Science des Finances*. Par Paul Leroy-Beaulieu. 5th ed., 1892, i, pp. 180, 413, and 769-771. In his recent *Traité Théorique et Pratique d'Économie Politique*, 2d ed., 1896, Leroy-Beaulieu devotes several pages to the

"general repercussion" doctrine, he warns his readers against placing too much reliance on it. We search through his works in vain for anything constructive.

In Germany we find more noteworthy contributions to the subject. The early German writers on public finance—such as Soden, Jakob, Fulda, Malchus, Biersack and Murhard—may be passed over as comparatively insignificant. They certainly made no definite impression on the course of the theory.¹ One of the early Germans, von Thünen, must, however, be mentioned because of his prominence in other domains of economic science.

Von Thünen devotes only a small portion of his remarkable work to the problem of taxation, and there discusses principally the incidence of the land tax. But his doctrine is worth noticing as showing how the equal-diffusion theory, logically developed, results in an absurdity. "It would seem then," he says, "that the state can increase its taxes to any conceivable extent, without harming the community, since every active citizen would bear the tax only nominally if he were simply to advance the tax without paying it in last instance. But this remarkable conclusion," adds von Thünen, "depends on the assumption that, after the imposition of the tax, the consumption of commodities remains the same. And that is, of course, the weak point of the theory."²

general topic (iv, pp. 791-799), but contents himself with a few unsatisfactory generalizations.

¹ Those who desire to study in detail the views of these rather unimportant writers are referred to the books of Kaizl and Falck (mentioned above, p. 3), who deal especially with the German authors.

² "Es scheint demnach . . . dass der Staat die Abgaben bis aufs äusserste erhöhen könne, ohne dadurch das Wohl des Ganzen zu gefährden, indem von allen seinen thätigen Bürgern kein Einziger dadurch bedrückt wird, weil Jeder die Abgabe nur vorschiesst, nicht selbst bezahlt. . . . Die Schlüsse, wodurch wir dieses sehr auffallende Resultat erhalten, beruhen auf der Voraussetzung, dass nach der Einführung der Abgabe die Consumption dieselbe bleibt." — *Der isolirte Staat, in Beziehung auf Landwirthschaft und Nationalökonomie*. Von Johann Heinrich von Thünen. Hamburg, 1826; 3d ed., Berlin, 1875, part i, p. 337. Cf. the French translation by Laverrière: *Recherches sur l'influence que le Prix des Grains, la Richesse du Sol et les Impôts exercent sur les Systèmes de Culture*. Paris, 1851, p. 292.

With Rau, however, we come to some positive results. Rau lays down his conclusions in the seven following principles: 1. A tax can be shifted only when it induces the majority of the taxpayers to a uniform conduct, which brings about a change in supply and demand. 2. A tax assessed on the income of an entire class cannot be easily shifted to the vendors of certain goods, because the restriction of the taxpayers' expenses affects different commodities unequally, so that the slight decrease of the demand will often be counterbalanced by a decrease of the supply. 3. Taxes will be shifted most easily on the consumers when all the sellers see themselves equally forced to make good the tax by decreasing supply, as in the case of customs duties. 4. Taxes on classes with fixed incomes, like public officials, cannot possibly be shifted. 5. Taxes which are not assessed according to the quality of goods for sale are less easily shifted than others. 6. In taxes on rent, on the source of profits, and on wages or profits, the important consideration is whether the taxpayer can escape the tax through a change in investments. 7. The transference of taxation cannot excuse an unjust system of assessment, because (*a*) the shifting is often more apparent than real, (*b*) if only a few taxpayers are assessed too high or too low, prices will not be affected, (*c*) in the interval many hardships are sure to ensue, and (*d*) even a complete shifting of a high tax is not without bad results because it often diminishes both production and consumption.¹ These principles of Rau, as we shall see hereafter, are of considerable help in the investigation of special problems.

¹ *Grundsätze der Finanzwissenschaft*. Von Dr. Karl Heinrich Rau. Heidelberg, 1832; 5th ed., 1864, iii, pp. 412-417. The sixth point reads as follows: "Insbesondere kommt es bei Steuern, die den Ertrag einer einzelnen Güterquelle zu treffen bestimmt sind, darauf an, ob der Besteuerte durch eine anderweitige Verwendung jener Quelle oder andere Einrichtungen der Auflage ausweichen kann. Dies wird in vielen Fällen durch die Beschaffenheit des werbenden Vermögens verhindert. . . . Deshalb bleiben die meisten Steuern auf den Renten des werbenden Vermögens liegen, die auch wirklich den grössten Theil des steuerbaren Einkommens ausmachen, oder werden noch auf sie hinübergewälzt."

More important, and in some respects the most suggestive of the works hitherto considered, is the book of von Hock. This author was the first to analyze and define the various kinds of shiftings — the shifting forward, the shifting backward, and the shifting off, terms to which allusion has been made in the introduction.¹ He maintains that, from the standpoint of the taxpayer, the tax must always be (1) a part of the cost of production of the commodity taxed, (2) a part of the general business expenses, (3) a part of the cost of subsistence, or (4) a burden on the net revenue or income. Examples would be, respectively, a tax on the manufacture of spirits, a license or business tax, a poll or house tax, and an income tax. In general, taxes of class one, class two and class three — so far as the necessities of life are concerned — are virtually additions to the cost of production, and thus tend to be shifted to the consumer. But this general rule has many exceptions, which may be summed up as follows:² (a) There will be no shifting *in general and for a long period* when the tax is so high as to produce a decrease of demand, or a substitution of inferior products on the part of the consumer. (b) There will be no shifting *temporarily*, when the state of the market changes so that the price of the articles falls below the price before the tax was imposed. (c) The exceptions to the shifting of taxes on necessities of life are far more frequent and dangerous to the laborer than the above exceptions to the producer; for wages vary frequently, and an increase of price in the necessities of life, joined with a low rate of wages, has the most lamentable results.

While Hock, therefore, accepts in general the cost of production theory of taxation, he is by no means a follower of Canard or Thiers. He confesses that, in the long run, the shifting of some taxes will produce an equilibrium — only this is not a fixed equilibrium, but one that is continually dis-

¹ He termed these "Fortwälzung," "Rückwälzung" and "Abwälzung" — all of them modes of "Ueberwälzung" or shifting.

² *Die öffentlichen Abgaben und Schulden.* Von Dr. Carl Freiherrn von Hock. Stuttgart, 1863, pp. 91-96.

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² *Die öffentlichen Abgaben und Schulden.* Von Dr. Carl Freiherrn von Hock. Stuttgart, 1863, pp. 91-96.

the house tax cannot be shifted, and that the indirect taxes or taxes on wages can be shifted only through the bankruptcy of the weakest, and that bankruptcy of the laborer means starvation and death. As a protest against the absolute and diffusion theories, Prince-Smith makes a strong case, although some of his own positions are not always tenable.

The more recent German writers on public finance have, with few exceptions, done little to advance investigation along these lines. For example, Roscher follows in the main the exposition of the older English writers.¹ Schäffle deals chiefly with the question of capitalization.² Wagner, even in the last edition of his great work, bases his exposition primarily on the works of Rau and Hock, and does not really get beyond them.³ Cohn contents himself with a few vague generalizations which are of little use.⁴ Vocke practically limits himself to the statement that reliance on the general shifting of taxes is treacherous, and that the whole subject properly belongs to the general economic doctrine of cost of production.⁵ Von Schall, the author of the latest monograph on taxation, devotes four and a half pages to the topic of shifting. We accordingly find in his exposition little but platitudes.⁶ In fact, the recent German literature is significant mainly for the fact that it attempts, sometimes very successfully, to evade the difficulties of the problem.

¹ *System der Finanzwissenschaft*. Von Wilhelm Roscher. Stuttgart, 1886, §§ 38-43.

² *Die Grundsätze der Steuerpolitik und die Schwebenden Finanzfragen*. Von Dr. Albert E. Fr. Schäffle. Tübingen, 1880, pp. 173-192. His most recent work discusses the topic somewhat more broadly, but is somewhat lacking in precision. *Die Steuern, Allgemeiner Theil*, 1895, drittes Buch, I Haupteintheilung, IV Abschnitt, 3 Kapitel.

³ *Finanzwissenschaft*. Von Adolph Wagner. Leipzig, 1880, ii; 2d ed., 1890, pp. 332-372.

⁴ *System der Finanzwissenschaft*. Von Gustav Cohn. Stuttgart, 1889, pp. 304-311. English translation by T. B. Veblen under the title of *The Science of Finance*. Chicago, 1895, pp. 365-373.

⁵ *Die Grundzüge der Finanzwissenschaft*. Von Dr. Wilhelm Vocke. Leipzig, 1894, pp. 205-212.

⁶ "Allgemeine Steuerlehre." Von K. Fr. v. Schall. In Schönberg's *Handbuch der politischen Oekonomie*. Tübingen, 4th ed., iii, 1897, pp. 236-240.

The English writers who have not yet been mentioned may be passed over with a few words. Richard Jones was one of the first to deny the Ricardian doctrine of incidence, as he was the first to dispute Ricardo's theory of distribution. He confined himself almost exclusively to the tax on wages and that on consumable commodities. Jones maintained that it is impossible to tell beforehand the ultimate incidence of a tax on wages; for this, he said, depends upon the effect of the tax upon the movements of population. If the tax were laid on wages, under such circumstances that it would not affect the movement of population but would be met by a sacrifice of secondary gratifications, it would not be shifted. Only under conditions the reverse of these would the tax be shifted from wages to profits.¹

David Buchanan had preceded Jones in controverting some of Adam Smith's doctrines on incidence. He took exception to the distinction between the ground rent and the building rent in the house tax.² Above all, he opposed the view that a tax on labor will produce a corresponding rise in wages. If wages were always at the bare minimum point, then indeed, he admitted, the doctrine might be true; but "while the wages of labor afford comforts and even luxuries, the laborer will always possess a fund for the payment of taxes. . . . All taxes on labor, or on such commodities as the laborer consumes, take effect by abridging his comforts. They increase the hardships, and tend generally to degrade the condition of the laboring classes."³ We have already seen that the argument of Buchanan induced Ricardo to make a qualification of his rigid theory.⁴

¹ "Tract on the Incidence of Taxes on Commodities that are consumed by the Laborer." By Rev. Richard Jones. In *Literary Remains, consisting of Lectures and Tracts on Political Economy*. London, 1858, pp. 143. Cf. "A Short Tract on Political Economy," *ibid.*, p. 277.

² *An Inquiry into the Nature and Causes of the Wealth of Nations*. By Adam Smith, LL.D. With Notes and an Additional Volume, by David Buchanan. Edinburgh, 1817, iii, p. 300, note.

³ *Ibid.*, pp. 338, 339. See also *Observations on the Subjects treated of in Dr. Smith's Inquiry, etc.* By David Buchanan. Edinburgh, 1817, 2d ed., pp. 59-64.

⁴ Above, p. 119.

James Mill, although he seeks to differentiate the doctrine in some points, is, on the whole, a follower of Ricardo. Mill maintains that a tax on produce or on farmers' profits is shifted to the consumer. So, also, he says, a tax on profits of stock will fall on profits. On the other hand, Mill accepts Ricardo's theory of the tax on wages, but only on the assumption that wages are at the lowest point to which they can be reduced. Otherwise, he thinks, a tax on wages will not be shifted to profits.¹

Senior confines his discussion to a few points. He agrees that taxes on manufactured commodities raise the price, generally by a sum exceeding the amount of the tax. But he takes issue with Ricardo in regard to a tax on agricultural produce. Senior maintains that, while the immediate effect of such a land tax is to raise prices, its ultimate effect is to diminish both the production and the consumption of raw produce, and therefore to leave its price unaffected. Tithes will, therefore, not be shifted to the consumers.²

John Stuart Mill keeps, in the main lines, to the arguments of his predecessors. He assumes perfectly free competition and the complete transferability of capital, and on these assumptions builds up his whole superstructure. He follows Ricardo, except in three points. In the first place, he accepts Senior's emendation of the doctrine of tithes, that in the long run the incidence is on the landowner, and not on the consumer. Secondly, he accepts the view of his father as to the incidence of a tax on wages. Thirdly, he analyzes more closely the incidence of taxes on exports and imports.³

McCulloch displays independence in only one point. A special tax on profits, he contends, will not necessarily raise prices, as Ricardo thought: instead of being shifted to the

¹ *Elements of Political Economy*. By James Mill, Esq. London, 1821; 3d ed., 1844, chap. iv, sec. v-xiii, pp. 248-292.

² *Political Economy*. By Nassau William Senior. London, 1835; 6th ed., 1872, pp. 120-124.

³ *Principles of Political Economy, with some of their Applications to Social Philosophy*. By John Stuart Mill. London, 1847, book v, chap. iv, § 4; chap. iii, § 4; and chap. iv, § 6.

consumer, it may lead to a reduction of cost. McCulloch points out that the producer will endeavor to meet the pressure of the tax, and to defeat it by greater skill and industry, by increased facility of production, or by a saving of expense, so that the tax will not continue to fall on him. Furthermore, it will not fall on the consumer.¹ In reality, however, this doctrine explains, not any process of shifting, but what was termed in the introduction the "evasion" of taxation; which is a very different thing. This idea of evasion may accordingly be said to have been introduced into scientific discussion by McCulloch.

The treatment of the subject by Fawcett is remarkable, first, for the exaggeration of some of the extreme statements of the older economists, — as, for example, the contention that a tax on commodities raises prices far beyond the amount of the tax and, secondly, for the somewhat vague ideas on the incidence of local taxation.² As both these points will be fully treated later, we may omit them here.

An interesting criticism of the older theories is to be found in the work of Cliffe-Leslie. This able writer pointed out that the older conclusions were frequently too rigid. "The theoretical canons commonly applied to determine the incidence of taxes," said he, "are often misleading. They furnish us simply with inferences from ideal 'average,' or 'natural,' rates of wages and profit, respecting the 'tendencies' of taxes 'in the long run' and in the absence of disturbing causes." But taxes are paid immediately, under the real conditions of life, and out of the actual wages, or profits, or other funds of individuals, not out of hypotheses or abstractions in the minds of economists."³ Cliffe-Leslie called

¹ *A Treatise on the Principles and Practical Influence of Taxation and the Funding System.* By J. R. McCulloch. London, 1845; 3d ed., 1863, p. 72.

² *Manual of Political Economy.* By the Rt. Hon. Henry Fawcett. London, 1863; 6th ed., 1883, esp. pp. 551 and 613.

³ "The Incidence of Imperial and Local Taxation on the Working Classes." By Thomas Edward Cliffe-Leslie. In his *Essays in Political and Moral Philosophy*, London, 1879; 2d ed. under the title *Essays in Political Economy*, London, 1888, pp. 388, 389.

attention to the effects of economic friction in neutralizing the working of supposed immutable laws, and in producing practical effects sometimes the very reverse of those assumed. He confined his arguments, however, to a few taxes; and his own constructive work is not very elaborate. His special doctrines will be noticed below.

The most recent treatment of the subject is to be found in the two general treatises on the science of finance by Professor Bastable and Professor Graziani, both of them published since the first edition of this work. Professor Bastable takes a more realistic view of the problem than many of his English predecessors. He not only devotes a chapter to the general discussion,¹ but appends some interesting, though brief, observations on the incidence of particular taxes. Much the same may be said of the treatment of the subject by Professor Graziani.² The views of both writers, which will be considered hereafter, are largely in harmony with those contained in the second part of this investigation.

¹ *Public Finance*. By C. F. Bastable. London, 1892; 2d ed., 1895, book iii, chap. v: "The Shifting and Incidence of Taxation."

² *Istituzioni di Scienza delle Finanze*. Da Augusto Graziani. Torino, 1897, libro v, capit. iv: "La RepercuSSIONe delle Imposte."

CHAPTER VI

THE NEGATIVE OR AGNOSTIC THEORY

THE doctrine that it is impossible to form any general conclusions about the subject of shifting scarcely seems to merit a place in the list of theories of incidence. Yet, as this is an opinion not infrequently met with among practical men, it will be well to give it passing attention.

The ablest expounder of this theory is Adolf Held. His discussion of incidence is based on a denial of cost of production as a condition of normal profits.¹ Held follows Schäffle in generalizing the rent conception, and is, to this extent, a forerunner of the recent English and American writers who adopt the same idea. This conception, applied to profits, results in the theory of greatest or marginal cost, and in the explanation of profits as the difference between marginal cost and market price. Held, however, does not draw the correct conclusions from his theory. He was an acute thinker, and a man of the noblest ideals; but he became so imbued with the idea that all of the old political economy was worthless that his strictures are as often false as true. Like so many of the younger Germans, he was stronger in criticism than in construction; and his own positive contributions to pure theory are not very profound. His whole treatment rests on a misunderstanding, which sometimes almost seems to be a wilful perversion, of the doctrine of cost of production. It would not repay us to discuss all his points in detail, as even the Germans themselves, who were at one time deeply impressed with his views, have now repudiated his extreme

¹ "Zur Lehre von der Ueberwälzung der Steuern." Von Adolf Held. — In *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, 1868, pp. 422-495.

doctrines. His conclusions are chiefly negative, and may be summed up in the confession that we can know nothing about the whole subject of incidence.¹ From Held, therefore, we learn nothing positive. His conclusions, moreover, have been accepted only by writers of such little standing that any further consideration of the agnostic theory is unnecessary.

¹ Cf., as a sample, the following conclusion: "Ueber die Abwälzung der Kapitalzinssteuer lässt sich also gar nichts sagen, sie lässt sich nicht einmal allgemein leugnen." — *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, p. 481.

CHAPTER VII

THE SOCIALISTIC THEORY

WHAT is here termed the socialistic theory of incidence really ought not to be put on a level with the general theories discussed in the earlier chapters; for it is a doctrine that is confessedly partial in character. But its application is so general, and its propagation among large classes influenced by the socialistic leaders is so earnest, that it deserves a few words.

The theory was developed primarily by the great agitator Lassalle. Lassalle devotes himself especially to the consideration of the laborer's interests. He terms indirect taxes all those which are not assessed directly on individual income or property, including, therefore, under this head not only taxes on consumption, but also land and business taxes. All these indirect taxes—in Germany, for instance—fall ultimately, says Lassalle, on the poorer classes of society; for, since the laborer has not sunk quite so low as the Irish workman or the Indian ryot, a little more can be taken from his wages before reducing him to starvation. Adam Smith and Ricardo, who were correct enough in their theory of the incidence of taxes on produce, he continues, are here mistaken; since it is a scientific fact that wages, as compared with other commodities, are always the last to rise in price. It is therefore the laborer who bears all the so-called indirect taxes—that is, the greater part of all taxes.¹

This exaggerated doctrine has been accepted not only by most of the socialistic theorists, but also by popular writers

¹ *Die indirekte Steuer und die Lage der arbeitenden Klassen.* By Ferdinand Lassalle. Zurich, 1863, pp. 9, 36, 41, etc.

who are very far removed from socialism. Mr. Thomas G. Shearman, for instance, while indeed limiting the definition of indirect taxes more narrowly than Lassalle, is equally extravagant in his statement of their incidence and effects.¹ The more modern and more scientific view, on the other hand, is that there is nothing inherently bad about an indirect tax, just as there is nothing inherently good about a direct tax. It depends entirely upon what kind of a direct or indirect tax it is. There are some good indirect taxes which do not fall on the laborer at all ; just as there are some bad direct taxes which, as we shall see later, do fall on the laborer.

¹ *Natural Taxation. An Inquiry into the Practicability, Justice and Effects of a Scientific and Natural Method of Taxation.* By Thomas G. Shearman. New York, 1895. See esp. chap. ii, "Crooked Taxation."

CHAPTER VIII

THE QUANTITATIVE OR MATHEMATICAL THEORY

THE authors who have in some respects done the best work in the study of the incidence of taxation are precisely those who have until recently been largely neglected.¹ They may be called, for lack of a better name, the quantitative or mathematical school. They are united not so much by similarity of conclusions as by identity of method.

Of these the earliest and most suggestive is Cournot. He started out from the assumption that the whole theory of incidence is an integral and necessary part of the general theory of value. In his first and most profound work,² in which he laid down many of the general principles which to-day form essential parts of the newer doctrines in pure economics, he attempted to apply his theory of value to the study of taxation. Cournot studied commodities under the regime of monopoly and of competition respectively, and employed the methods of differential calculus to ascertain what influence an increase in the supply price of any commodity would have on the producer as well as on the consumer. He analyzed the laws of constant, increasing and diminishing returns in their relations to this influence, and he came to some important conclusions which will be discussed in the second part of this work.

While it is undeniably a relief to read the clear-cut and

¹ Not one of the recent German or French elaborate works in finance refers to a single member of this school. Kaizl and Falck also neglect them completely.

² *Recherches sur les Principes Mathématiques de la Théorie des Richesses*. Par Augustin Cournot. Paris, 1838, chaps. vi and viii. An English translation was published in 1898 in Professor Ashley's *Series of Economic Classics*, under the title of *Researches into the Mathematical Principles of the Theory of Wealth*.

precise doctrines of Cournot, as compared with the vague and misty generalizations of many writers of the eclectic school, his treatment of incidence is not entirely adequate. His whole study is practically a discussion of the incidence of taxes on commodities. He fails to remember that there are other taxes besides those on commodities and on profits; and he ignores the fact that to regard a tax as raising the normal supply price or the cost of production does not exhaust the possibilities of the case. It is true, indeed, that in a later work¹ he attempts to discuss the incidence of taxation without the use of mathematics, and to extend the discussion to other taxes. But this attempt is not always successful. In certain cases—for example, the tax on buildings—his views are even erroneous. Moreover, whole classes of taxes, like that on wages, are omitted; and no attempt is made to lay down any general conclusions. So far as the study of the taxation of commodities is concerned, however, Cournot's book has scarcely been surpassed.

Some of Cournot's ideas were developed by another French mathematician, Fauveau. He added practically nothing, however, except a series of elaborate mathematical formulæ, and is to be noticed mainly because of his energetic opposition to the optimistic theory. "The diffusion of taxes," says he, "cannot render taxes proportional any more than the diffusion of light makes a room equally illuminated in every part, whatever be the position of the candle."² Fauveau concludes rather sadly that it is quite as easy for an originally equal tax to become unequal in its operation as for an originally unequal tax to become equal.

Many years later an attempt of a similar nature was made by an English mathematician, Fleeming Jenkin. Jenkin's essay deals chiefly with what he calls taxes on commodities.

¹ *Principes de la Théorie des Richesses*. Paris, 1863, book iii, chap. viii.

² "La diffusion de l'impôt, nous paraît-il, ne peut pas le rendre en définitive proportionnel pas plus que la diffusion de la lumière ne fait qu'une chambre est éclaircie également en tous ses points quel que soit l'endroit de cette chambre où l'on a placé une bougie." — *Considérations Mathématiques sur la Théorie de l'Impôt*. Par G. Fauveau. Paris, 1864, p. 58.

Although he evidently knew nothing of Cournot, Jenkin was among the first of the Englishmen to apply the mathematical method to economic problems. His original contribution consisted in the use of diagrams based on a combination of the demand curve and the supply curve. He concluded that "the ratio in which a tax on commodities falls on sellers and buyers is simply the ratio of the diminution of price obtained by the sellers to the increase of price paid by the buyers."¹ In his treatment of taxes on land and on houses, however, Jenkin failed to make the qualifications which alone can give the results practically true in every-day life. Moreover, he neglected other taxes, and made almost no attempt to give any general laws of incidence. Jenkin's remarks on the special point of the influence of taxes on cost, however, are suggestive, and will be considered later.

About a decade later, a young Italian economist, who has since become well and favorably known to English readers, Professor Pantaleoni, devoted a whole volume to the study of the incidence of taxation.² He, also, was ignorant of the work of Cournot, but attempted to base his theory on the doctrine of cost of production worked out on arithmetical lines. Pantaleoni devoted over half of his work to what is really a part of pure economic theory—the doctrine of value—and then proceeded to discuss the incidence of some of the chief separate taxes. His study is the most comprehensive one yet published on the general subject, although—strange to say—it has, until very recently, received no consideration outside of Italy itself. While there is a great deal of acute and original thought in the monograph, the work suffers from the fact that its doctrine of incidence is largely

¹ Fleeming Jenkin, "On the Principles which Regulate the Incidence of Taxes," in *Proceedings of the Royal Society of Edinburgh*, Session 1871-1872, pp. 618-631. Cf. Grant's *Recess Studies*, 1870, pp. 151-185, for his "Supply and Demand schedule." The essay on taxation was reprinted in *Papers, Literary, Scientific, &c.*, by the late Fleeming Jenkin. Edited by Sidney Colvin and J. A. Ewing. London, 1887, ii, pp. 107-122.

² *Teoria della Traslazione dei Tributi. Definizione, Dinamica e Ubiquità della Traslazione.* Da Maffeo Pantaleoni. Rome, 1882.

based upon economic theories which are open to question. Thus, the value of the author's treatment of the tax on profits is somewhat impaired by the dubious doctrine of profits that he espouses. Again, his treatment of the land tax and of the house tax is neither exact nor correct. It may, in fact, be affirmed that some of the doctrines upheld in the work no longer represent the views of the author.¹ We omit in this place a detailed statement of the special doctrines, as we shall have occasion to revert to them constantly in the following pages. Notwithstanding some imperfections, Professor Pantaleoni's work contains, on the whole, the best existing treatment of the incidence of taxation, as a matter of pure theory.

Comparatively few of the recent continental writers belonging to the mathematical school have attempted to make any application of this method to the theory of the incidence of taxation. As regards the Austrian writers, who have developed the psychological, rather than the mathematical, method in economics, and who have applied the newer theories of value to various problems of taxation, neither Menger, Wieser, Böhm-Bawerk nor Sax has made use of these newer theories to explain the doctrines of incidence. On the other hand, Auspitz and Lieben in Austria, and Launhardt in Germany, apply some of their diagrams of the supply and demand schedules to questions of taxation.² Among the modern continental writers of the mathematical school, however, the French, or rather Swiss, economist Walras stands preëminent. When he discusses the theory of taxes on monopolies, he refers to the works of Cournot and Dupuit.³ But his own

¹ In answer to a letter from the present writer stating that he did not agree with several of the doctrines laid down in the work, Professor Pantaleoni intimated that his present views differ in some respects from those expressed in the book.

² Auspitz und Lieben, *Untersuchungen über die Theorie des Preises*, 1889; W. Launhardt, *Mathematische Begründung der Volkswirtschaftslehre*, 1885.

³ Dupuit was one of the first to attempt to illustrate the principles of marginal utility and of monopoly price by mathematical methods. See his articles "De la mesure de l'utilité des travaux publics," in the *Annales des Ponts et Chaussées*, 2d series, vol. viii, 1844; and "De l'influence des péages sur l'utilité des voies de communication," *Ibid.*, 1849.

treatment of the whole subject results in conclusions that seem a little too simple. According to Walras, a tax on land, owing to the theory of the rent charge, rests only on the original owners. A tax on wages rests on the wage-earner, because the theory of capitalization is not applicable here. A tax on what he calls artificial capital or interest is nothing but an indirect tax on consumption, because it is inevitably shifted. Taxation can really hit only "natural wealth," that is, either agricultural rent or wages.¹ In a more recent work, Professor Walras recurs to his general theory of taxation, but has only a little to say about incidence, further than to point out the impossibility of the equal-diffusion theory.²

We come now to a group of economists who have advanced some new views during the past few years. One of the most original of these recent efforts has been made by an acute Swedish writer — Knut Wicksell.³ He complains that the ordinary theory of incidence deals only with the relations of the producer to the consumer; and objects that, in the many cases where the tax is supposed to rest upon the producer, this theory does not go far enough, since production is a process involving the coöperation of several factors — land, labor and capital. The real difficulty, therefore, says Dr. Wicksell, is to trace the effect of a tax on these various classes of society, — the farmers, the capitalists and the laborers. In order to solve this problem, he accepts the theory of Böhm-Bawerk as to the importance of the comparative period of investment.⁴ This theory, as is well known, states that the longer the comparative production-period or period of investment of capital, the greater its productivity. Since the application of labor amounts to a lengthening of this

¹ *Théorie Critique de l'Impôt*. Par Léon Walras. Paris, 1861, pp. 31-57. In his *Éléments d'Économie Politique Pure*, M. Walras seems to have altered his opinion, but still clings to the rent-charge theory. See the 3d ed., 1896, pp. 446-460.

² *Études d'Économie Sociale*. Par Léon Walras. Paris, 1896, p. 445.

³ *Finanztheoretische Untersuchungen nebst Darstellung und Kritik des Steuerwesens Schwedens*. Von Knut Wicksell. Jena, 1896.

⁴ *Ibid.*, p. 31.

period of investment, the productivity of labor will increase with the extent to which it is applied in long periods of production. Starting out from this premise, Dr. Wicksell seeks to reconstruct the theory of incidence, by endeavoring to measure the effects of a tax upon the elements that contribute to a lengthening or a shortening of the production period.¹ His conclusions, however, although based on much keen and attractive analysis, are vague. In order to simplify his processes, he posits all kinds of hypotheses which are not true in actual life, and seeks to bolster up his conclusions by a detailed apparatus of mathematical reasoning. When he comes to the conditions of real life, the complications become so great that his preliminary hypotheses turn out to be of little use, and the conclusions vanish.² Nevertheless, as an intimation of the kind of difficulties that beset those who attempt to trace the ultimate effects rather than the immediate incidence of certain kinds of taxes, Dr. Wicksell's book is worthy of study. Whether the application of his new principle will really solve any present problems is still to be ascertained.

Among the most recent Italian writers of the mathematical school, reference may be made to Professor Conigliani. He devotes himself primarily to the wider subject of the general effects of taxation.³ So far as he speaks of shifting and incidence, he attempts to give only the "abstract, general theory," apart from its application to any existing systems of taxes, and apart from any "exceptional, transitory or irregular" phenomena. The result of such a method of study, based on the recent Austrian theories of subjective value, is

¹ *Finanztheoretische Untersuchungen nebst Darstellung und Kritik des Steuerwesens Schwedens*, p. 37.

² Dr. Wicksell himself states: "Dies mag nun so klingen als ob die praktische Lösung der Frage für immer unmöglich sei." He thinks that an escape from this conclusion may be found in the fact that we really need only an approximate answer. But he naively adds: "Allerdings fehlen sogar für eine solche approximative Lösung die nötigen Data so gut wie vollständig." — *Ibid.*, p. 56.

³ *Teoria generale degli Effetti Economici delle Imposte. Saggio di Economia Pura*. Del Dottor Carlo A. Conigliani. Milan, 1890.

partly a series of truisms—in which we cannot, even with the best of will, discern much advance in theory—and partly a statement of tendencies couched in such general terms as to be of little use in the elucidation of practical problems. We include Conigliani under the mathematical school only because he himself professes to be among its followers. As an example of his method, we give his final conclusion: “A tax of given intensity and extension falls with the less intensity and extension on individual economies, and produces a less unequal effect on economic society, in proportion as society is more developed. The incidence, when it does not have a considerable extension or intensity, assumes the less easily the character of a change in activity, in proportion as society is more advanced. Finally the change in consumption will take place with greater disturbance of the equilibrium in the degree of the satisfaction of wants, and therefore with less change in the internal arrangement of individual economy, in proportion as the social environment in which these changes of taxation take place is more advanced.”¹ And this, Conigliani tells us, “completely exhausts the general theoretic problem of the effects of taxation.”

It is only fair to Professor Conigliani to state that in another more recent work² he has shown his ability to grapple with the detailed problems of shifting. In this admirable book—which, like so many of the recent works by Italian writers, fairly staggers the reader with its wealth of material and evidences of wide reading—Professor Conigli-

¹ “Un’ imposta di data intensità ed estensione, è tanto meno intensamente ed estesamente incisa su alcune economie, e lo è tanto meno disegualmente sulla società economica complessiva quanto più questa è evoluta. L’ incidenza poi, quando essa non abbia una considerevole estensione ed intensità, assume tanto meno facilmente il carattere di un mutamento nell’ attività, quanto più la società è progredita. Infine il mutamento nel consumo si avvera con tanto maggiore violazione dell’ equilibrio dei gradi di soddisfazione dei bisogni, e quindi con tanto minore alterazione dell’ ordinamento interno dell’ economia individuale, quanto più progredito è l’ ambiente sociale, in cui si immagini il mutamento di imposta.” — *Ibid.*, p. 276.

² *La Riforma delle Leggi sui Tributi Locali*. Da C. A. Conigliani. Modena, 1898, 751 pp.

ani comes to close quarters with some of the difficult questions of incidence. But here he abandons the mathematical method, and treats the problem very much from the same point of view as his compatriot Graziani.¹ The only Italian writer to follow the lead of Cournot is Major Barone, who substitutes diagrams for algebraic formulæ. He has published a succinct but very suggestive essay² on some fundamental theorems in the pure theory of taxation, working out in mathematical form some of the points referred to in the following pages.

Among recent English writers, we turn naturally to the two leaders of economic thought, Professors Marshall and Edgeworth. The former has called attention to the connection between the doctrine of incidence and the general law of value. Although he has reserved the fuller study of the shifting of taxation for the second volume of his great work, his incidental treatment of the topic has already enriched the discussion with some profound remarks and some interesting diagrams.³

Professor Edgeworth has treated the general subject in a series of recent articles.⁴ He discusses the abstract theory with all the force of reasoning, the nicety of distinction and the acuteness of criticism to which the readers of his other works have become accustomed. His presentation discloses, perhaps even better than that of Cournot, the strong — and also the weak — points of the mathematical method. While we shall often have occasion to refer to the substance of Professor Edgeworth's remarks hereafter, this is a convenient place to say a word about the mathematical method in general.

To the reader who understands the higher mathematics,

¹ See above, p. 160.

² "Di alcuni Teoremi Fondamentali per la Teoria Matematica dell' Imposta." Da Enrico Barone. In the *Giornale degli Economisti*, seria seconda, anno v (1894), pp. 201-210.

³ *Principles of Economics*. By Alfred Marshall. London, 1890. 3d ed., 1895, pp. 519, 523, 535.

⁴ "The Pure Theory of Taxation." By F. Y. Edgeworth. In the *Economic Journal*, vii (1897), pp. 46-70, 226-238.

the hypothetical principles of the influence of tax on price can be illustrated with a degree of refined precision that is eminently satisfactory. But this advantage is occasionally secured at a heavy cost. While the intricate algebraic formulæ may be worked out with perfect exactitude, the slightest flaw in a single symbol may invalidate the whole conclusion. Furthermore, the mathematical study of the pure theory often assumes a simplicity of condition which does not actually exist; it purposely neglects the all-important element of friction, and constructs hypotheses irrespective of their agreement with the facts of actual life. If, as sometimes happens, these hypothetical results are applied to the conditions of the market-place, the results are likely to be unreal. Within narrow limits, the mathematical treatment of incidence is exceedingly valuable, but except where diagrams are employed, it is apt, perhaps, to be of greater value to the writer himself than to the reader. In fact, the chief advantage of the mathematical method is seen in the use of diagrams, where an intricate point which involves the simultaneous consideration of several causes can be illustrated with greater brevity and clearness than in any other way. But when we proceed from diagrams to the higher algebra, the use of the mathematical method sometimes leads to refined calculations of more importance to the mathematician than to the economist, and of little perceptible use in solving any practical economic problems. It may even be doubted whether the mathematical method has independently discovered any important principle susceptible of practical application that could not have been also expressed in every-day language. That it has not preserved its votaries from error is evident from Cournot's unhappy treatment of the mathematics of international value. That it sometimes leads to results which are likely to divorce still more the economics of the closet from the economics of the market-place may be illustrated by a slip of Mr. Edgeworth himself.¹

¹ See the extended mathematical proof (in the *Economic Journal*, vii, pp. 230-232) of the proposition that a tax on first-class railroad tickets will reduce

It has usually happened, however, that most of the mathematical economists have been at the same time distinguished thinkers, who have been able, as in the case of Professor Edgeworth, not so much because of their mathematics¹ as because of their power of keen analysis, to illumine many a dark corner of pure theory. It is not surprising, then, that to the mathematical economists we owe some of the ablest contributions to the subject of the incidence of taxation.

Our long and tedious task has come to a close. The subject of the incidence of taxation, as we have seen, was one of the earliest to engage the attention of writers on economic questions; and because of its difficulty, as well as of its importance, it has remained a favorite topic for modern economists. The writers prior to Adam Smith, with a few distinguished exceptions, considered only a single phase of the larger problem, and attempted to connect their discussion with some pending measures of actual legislation. The history of their views is of interest primarily as containing the germs of future doctrines. Beginning, however, with the Physiocrats and Adam Smith, we meet broader principles based on fundamental theories of the new economic science. The Physiocrats spoiled their doctrine of incidence by accepting certain peculiar views on the nature of wealth and the

(not increase) the price of the tickets of *all* classes. The mathematics which can show that the result of a tax is to cheapen the untaxed as well as the taxed commodities will surely be a grateful boon to the perplexed and weary secretaries of the treasury and ministers of finance throughout the world!

¹ The average man will agree with Jowett, who writes to a correspondent: "I hope that you will not . . . write anything that is not perfectly intelligible and which cannot be expressed in words without symbols. You remember that I was always an enemy to the mathematical formulæ. (You) will reply that I do not understand them, which is very true. But . . . I think that all attempts of any kind to express ideas by numbers and figures have failed and will always fail because they are not in *pari materia*—things indefinite cannot be measured by things definite, though they may be sometimes illustrated by them." — *The Life and Letters of Benjamin Jowett*. By Abbott and Campbell. 1897, ii, pp. 315, 316. For the other view, see Edgeworth, *Mathematical Physics*, 1881; and the same author's address "On the Application of Mathematics to Political Economy," in the *Journal of the Royal Statistical Society*, lii, part i, pp. 538–576.

principles of production. Adam Smith and Ricardo here, as almost everywhere else, disclosed the real starting-point of the inquiry, and gave the true direction to future investigation. Their doctrines need, indeed, to be rounded out, and in part corrected; but this is true only to the extent that their theories of economics in general are in need of the revision that they have received in recent times.

The acceptance of the doctrines of Adam Smith and Ricardo on the subject of incidence was retarded by two peculiar theories which long claimed the attention of students. The equal-diffusion theory, as we have seen, was developed primarily by French writers, although it soon spread to other countries, and at one time appeared to be in almost complete possession of the field. It owed its popularity chiefly to its seeming simplicity; and it was welcomed by the conservatives as a defence of the existing social order. But a few acute thinkers, as we now know, recognized that the theory was susceptible of a pessimistic, as well as of an optimistic, interpretation; and with the new weapon of attack now given to the radicals, the popularity of the doctrine waned. Its total disappearance, however, was due to the fact that the essential weakness of the premises was gradually recognized. The other doctrine which, for a time, engaged attention was the capitalization theory. This was, however, applied primarily to the consideration of the land tax, and never entirely supplanted the older classical theories in general.

The great mass of writers with whose views we have become acquainted continued to discuss the subject in a more or less conventional manner. Some of them, as the members of the eclectic school, made certain valuable suggestions; and we can notice almost from decade to decade an increase in the breadth of view and in the attention to points neglected by their predecessors. But the new theories of distribution had not yet been worked out, and the results, therefore, were only partly satisfactory. Two minor theories that next presented themselves were the rather de-

spairing doctrine of those who regarded the problem as too intricate for any satisfactory solution, and the more self-satisfied theory of those reformers who considered that they had discovered the real social bearing of the doctrine of incidence. A real and lasting advance, however, was made by the writers who addressed themselves primarily to the quantitative relations of pure theory and who, in part at least, based their conclusions on mathematical processes. But here again the very welcome and timely insistence on the general principles of pure theory was attended with some drawbacks. On the one hand, many of the writers seem to have considered pure theory as synonymous with the theory of normal law under static conditions and thus neglected the element of friction or the working out of economic law under dynamic conditions. In the second place, many authors contented themselves with stating these normal laws of incidence in general, with only a passing illustration here and there. Little attempt was made to take up the most important existing taxes in turn, and to trace their incidence in detail.

There still remains, then, a task to be accomplished. Not that a complete revolution or reconstruction of the doctrine of shifting is necessary or possible. Much—nay, by far the greater part—of the doctrine has come down to us in a systematic development from the original theories of the founders; but here and there excrescences are to be lopped off, gaps are to be filled. The newer theories of distribution require in part a recasting of the doctrine of shifting; while a due regard to its practical importance justifies a restatement of the whole subject, which, while by no means inattentive to the purely theoretic aspects of the topic, shall endeavor continually to bear in mind their application to the problems of actual life.

PART II

THE DOCTRINE OF INCIDENCE

CHAPTER I

GENERAL PRINCIPLES

THE problem of the shifting of taxation is primarily a question of prices. To solve it is to discover whether, and to what extent, the imposition of a tax effects changes in the revenues and the expenses of individuals; in other words, to ascertain which of the two parties to every economic transaction—the buyer and the seller—bears the burden of the tax. This is obviously not the same as saying that we are dealing only with the relations between the producer and consumer. The vendor may, indeed, be a producer; but he may also be an owner who has acquired the commodity without producing it. Whatever these relations may be, the essence of the inquiry is: Are prices raised, and if so, to what extent are they raised? Whether we deal with the prices of consumable commodities, of capital, or of labor, this is always the nature of the problem.

It is readily perceived, therefore, that the theory of the shifting of taxation is a part of the wider theory of value, and that a comprehension of the facts of incidence depends on an application of these laws of value. But the laws of value, as is now well recognized, deal primarily with the more or less subtle changes caused in the supply of, or in the demand for, commodities. Even the cost of production, which plays so fundamental a part in economic progress, affects price through the medium of changes in the relations of supply and demand. Our concern, then, will be not only to mention those general laws of value which are of especial significance to the subject under discussion, but also to call attention to the varying conditions under which these laws work them-

selves out. In other words, we have to deal not alone with the "pure theory," but also with those phenomena of friction which impede the action of the general laws and are of fundamental importance in any application of the doctrine to the affairs of real life.

If we take the simplest case of a tax imposed on some commodity, the ordinary result may be pictured somewhat as follows:—

The tax must evidently at first be regarded as an increase in the cost of production. For the time being, and until the old stock is exhausted, those who produced before the new tax was imposed are benefited to the extent of the ultimate rise in price. But as soon as this interval has elapsed, all producers are on the same footing. Since the tax is an addition to the cost of producing the article, they will seek to recompense themselves by raising the price. Unless they succeed in this, their profits will be curtailed and the production of the article will diminish. For one of two results must ensue: either producers will gradually transfer their capital to untaxed industries, or, even if the transfer of capital is impossible because it is firmly fixed in the industry, production will be curtailed by the crowding out of those who were previously on the very margin of profitable production, while the tax will prevent the influx of any new capital. In either case, then, in the long run, the supply will decrease; and this diminution, provided the commodity continue to be produced at all, will involve an increase of price. The consumer will, therefore, bear the burden of the tax.

This seems to be a very simple process. Not a few have even supposed that this description exhausts the study of incidence. The extent, however, to which this is actually true, and therefore the extent to which such a tax will be shifted to the consumer, depends on a number of important considerations, inattention to which will vitiate not only any theoretical conclusions as such, but also their application to the facts of every-day life.

In the application of the general law of value to taxation the chief considerations are as follows: —

1. Is the commodity durable or perishable?
2. Is the commodity subject to the law of monopoly or that of competition?
3. Is the tax general or exclusive?
4. Is there complete mobility of capital?
5. Is the demand for the commodity elastic?
6. To what extent do differential advantages of production affect the supply?
7. Is the article supplied at a constant, an increasing or a diminishing cost?
8. Is the tax imposed on margin or on surplus?
9. Is the tax large or small?
10. Is the tax proportional or graduated?
11. Is the commodity a final good or merely an intermediate good?

These considerations may now be treated in order.

1. *Is the Commodity Durable or Perishable.*

On this distinction depend the phenomena of what is called the capitalization or the amortization of taxation. This principle may be expressed as follows: —

When a special tax is imposed on any one class of commodities to the exclusion of all others, the tax will, under certain conditions, fall entirely on the original owner of the commodity — that is, on the one who owned it before the tax was imposed — and not on the future purchaser; for the tax will be discounted through a depreciation of the capital value of the article by a sum equal to the capitalized value of the tax. For instance, if the ordinary return on investments is five per cent, and if a tax of one per cent is imposed on all railway bonds, the price of these bonds will fall from par to eighty. The new purchaser will really not bear the weight of the tax; for although his net return on each bond of a hundred dollars will be only four dollars, he will still make

five per cent on his investment. Four per cent of one hundred is the same as five per cent of eighty. In the same way, when unequal taxes are levied on different classes of commodities, the excess of the tax on the overtaxed commodity above the general rate will be capitalized, so as virtually to exempt future owners from this differential burden. The tax, then, will fall on the original owner, whose property will be diminished in value by the capitalized equivalent of the excess of taxation. On the contrary, when a special tax is levied on such commodities at a lower rate than that already imposed on other classes, the deficiency in the tax will be capitalized in a sum which will be added to the value of the property in the hands of the original owner. To use our preceding illustration, let it be assumed that all railway bonds are taxed one per cent and sell at eighty. If the tax on the bonds of a single railway company is for some reason permanently reduced to one-half of one per cent, these particular bonds will rise in price to ninety. In this case the original owner, and not the purchaser, will benefit by the reduction or the remission of taxation, just as in the preceding case the original owner, and not the purchaser, suffered from the tax. Where the value of the commodity diminishes, the term "amortization of taxation" seems suitable; where the value of the commodity increases, the phrase "capitalization of taxation" is preferable. Both phenomena show the results of the working out of the same principle.

The question now arises: Under what conditions will this phenomenon appear? In answering this question due importance must be assigned to the following five conditions:—

A. The tax must be an exclusive or an unequal tax.

B. The tax must be levied on a commodity which has a capital value and is capable of having an annual rental value.

C. The tax must be levied on a commodity of so protracted a consumption period that several annual payments are expected to be made.

D. The tax must not be susceptible of being shifted to

the consumer by the fact that the commodity is used in further production.

E. The general relations of demand and supply must remain in other respects the same.

In the first place, it is clearly necessary to assume inequality of taxation. If there is no excess, there is nothing to be capitalized. The theory applies only to taxes which are exclusive, or which exceed other taxes by a definite amount. Inequality of taxation is the corner-stone of capitalization.

Secondly, the commodity must have a capital value which is susceptible of diminution. This would, for instance, hold true of land; in fact, we have seen that the whole theory arose from a consideration of the land tax.¹ It is equally true, however, of any other commodity whose market value is nothing but the capitalized rental value, the capitalization being fixed at so many years' purchase. But the principle cannot apply to taxes on income in general, or to taxes on wages, or to poll taxes, because in these, and in all similar cases, there is no capital value that is subject to amortization or capitalization.

Thirdly, the commodity in question must be relatively durable in character. This consideration is of such cardinal importance that we have put it at the heading of this whole section. When we speak of a tax, we may mean either a single payment or a more permanent annual payment. If the tax consists of one payment only, as in the case of the federal so-called direct tax during the Civil War, there is no opportunity for capitalization. Again, if the commodity is of so ephemeral a nature that it will be consumed before the tax hits it a second time, there can obviously be no capitalization. This is the case with the so-called indirect taxes on commodities. If a tax is imposed on a barrel of flour, it will ordinarily be shifted to the consumer. But if the commodity is so durable that it may be subject to repeated taxes, and if the taxes are levied at about the same rate from year to year, the anticipated

¹ See above, pp. 137 *et seq.*

annual payments may be lumped together in such a way as to cause a change in the capital value of the thing taxed. If the special tax covers ten years of the consumption period of a house, the imposition of the tax on houses depreciates the value of the house by the present worth of a ten-year annuity. If the commodity yields a perpetual rental or use—as in the case of a piece of land or of a perpetual bond—a special tax or an unequal tax on this land or bond depreciates its value by the present rate of a perpetual annuity. The more durable the commodity, the greater the chance of capitalization.

Fourthly, the principle will not apply if the tax is imposed on a commodity which is to be used in further production, where the tax will simply raise the price of the product, instead of lessening the value of the principal or source of the product. Thus an exclusive tax on iron used for making tools may result in an increased price of iron tools and may be shifted onward to the consumer. If by the shifting of a tax we mean its transfer forward to some one else, capitalization is the opposite of shifting. If a tax is shifted onward, it cannot be capitalized; if it is capitalized, it cannot be shifted onward. Capitalization implies a depreciation of the capital value; and this is possible only when the tax rests on the initial possessor—that is, when it is not shifted onward to any one else.

On the other hand, if we extend our conception of shifting to include the process of shifting backward, as well as that of shifting forward, we might call capitalization a kind of shifting. For, as we have just seen, the new purchaser who continues to pay the tax from year to year does not bear it, but in one sense shifts it back upon the initial possessor. He pays the tax indeed; but he has already deducted from the purchase price a sum equal to all the future taxes which he expects to be called upon to pay. The difference between his case and that of a dealer who shifts a tax on commodities back to the producer instead of forward to the consumer is that, in the latter case, the tax is levied only once on a com-

modity destined to immediate consumption, while in the former case a whole series of payments is levied on a durable commodity. In the one case we have the shifting back of a single tax; in the other case we have the shifting back of a whole series of taxes. For capitalization implies a change in price equal to the capital value of all anticipated payments.

Finally attention must be called to the fact that the principle sometimes seems to the careless observer to be robbed of practical importance, as in the case of special taxes on property or on profits, where the capital value of this class of commodities for any reason fluctuates in price. For example, if a special tax were levied on government securities it might nevertheless happen that, for some reason, general confidence in government bonds might increase to such an extent as to counterbalance the decreased returns from the investment. In such a case, although there would obviously be a capitalization of the tax, the process would be obscured, and there would be no final diminution of capital value. Again, in the case of a special tax on land, the value of land as an investment might nevertheless for some reason increase. This also would impair the easy recognition of the principle; the decrease in price due to capitalization of the tax would be counteracted by the increase of price due to changes in demand. Yet, although the price has remained the same, capitalization has obviously taken place; for had no tax been imposed, the price of the bonds or of the land would have risen instead of remaining stationary. The process of capitalization always results in actual diminution of capital value, if by value we mean the price as fixed by the equation of demand and supply. In the absence of disturbing causes which suddenly change this equation, the process is naturally a simpler one. But in every case, subject to the conditions laid down above, it remains true that the increase of an exclusive tax results in a partial confiscation, and that its decrease is tantamount to a free gift.

With all these qualifications, the capitalization of taxation

remains an important topic in the study of incidence. Its cause is inequality ; its result is confiscation or gratuity.

2. *Is the Commodity subject to the Law of Monopoly or to the Law of Competition?*

From the point of view of pure theory, this distinction is vital ; indeed, the most recent formulation of the law of value makes a sharp line of demarcation between the régime of monopoly and that of competition. In the domain of practical life, also, the distinction is of great importance, for the number of commodities subject to the régime of monopoly in modern times is great and growing. It is, indeed, true that the cases of a natural monopoly are perhaps not more numerous in modern times. Not only, however, do we find more and more legal monopolies, through the protection of industries by patents and copyrights, but it is a familiar fact that there has been a great increase in the number and significance of the so-called economic monopolies,—those industries where through the working out of economic law the tendency is toward an ever greater concentration of capital, gradually shutting out the existence of competition, until finally we reach the stage of complete monopoly. The familiar examples of this are, first, the so-called municipal monopolies, — gas, water, electric light, street railway business ; secondly, occupations like the railroad and express, the telegraph, the telephone ; and thirdly, the host of modern enterprises which are assuming the form of trusts.

The fundamental difference between the régime of monopoly and that of competition is, that in the former case price is not fixed by the cost of any marginal product. The important consideration here is that a monopolist fixes the price at the point that will yield the largest net return, and that he will limit the production to such an amount as will afford him this maximum monopoly revenue. He differs from the producer under competitive conditions in that he controls the supply. From this fact result such important differences

in the law of shifting that in almost every succeeding statement of principle it will be necessary to distinguish between the conditions of monopoly and those of competition.

3. *Is the Tax General or Exclusive?*

In almost all the writings on incidence, the particular tax under discussion is assumed to be special or exclusive. For purposes of pure theory, this assumption is legitimate, nay even necessary; for it is only through isolation that we can get a clear picture of the working of any single force. But it has not infrequently happened that results, laboriously attained as hypothetically true, have been at once applied to conditions under which the hypothesis is no longer valid. We may, for example, study the effects of a particular tax, like that on houses, and reach conclusions which are correct on the assumption that the tax is the only one; but in actual life, the house tax may be only one of a series of taxes, and this fact may at once invalidate our nicely calculated results. Other things being equal, the more general a tax, the narrower the taxless field to which the persons concerned can migrate; the less general the tax, the greater the chance that the tax will be shifted.

4. *Is there Complete Mobility of Capital?*

The ordinary theory is that when capital does not find its usual remuneration in one occupation, it will be transferred to another industry where the chances are better. In general, this hypothesis is valid, because it is based on the principle of least effort. The economic man may be assumed to endeavor to secure the greatest returns with the smallest outlay. He will transfer his capital from place to place, or from occupation to occupation, according to his opinion of the chances of profit.

At the same time, there may be obstacles to immediate transfer. Thus, where capital is firmly fixed, the owner may lose more by attempting to change it than he would gain by

the transfer. If the capital is unremuneratively invested in a given industry, there will be no fresh accessions of capital to it; and, as the other industries prosper, the relative diminution of capital in the first industry will, in the long run, be equivalent to a transfer of capital from it to the more prosperous occupation. But, in any given business, at any given moment, there may be all degrees in the rate of transfer, in the degree of mobility. At the one extreme lies the stock exchange business, where the mobility is almost complete; at the other extreme lie those forms of agriculture in which capital devoted to improvements is almost entirely irremovable.

In addition to this cause of comparative immobility, we may mention minor reasons, such as the ignorance of the capitalist, the risk connected with the transfer, social considerations and legal obstacles.¹ Whatever the reasons, it is obvious that when a tax is imposed on capital in any industry, the smaller the degree of mobility, the less is the prospect of shifting, and the slower will be the process.

5. *Is the Demand for the Commodity Elastic?*

In the general proposition laid down above,² no reference was made to the conditions of the demand: it was assumed that demand would remain constant. But this assumption is obviously not the only possible one. In order fully to consider the changes in price caused by a tax, we must therefore regard the situation more closely from the point of view of the effective demand.

We speak of the demand for a commodity as elastic, when a change in price produces an alteration in demand. In such a case if the price goes up, the demand falls off; if the price goes down, the demand increases. There are as many degrees of elasticity in the demand for various commodities as there are variations in human wants and in the ability of men to satisfy those wants. On the other hand, if the

¹ See below, p. 267.

² p. 180.

demand for a commodity is not variable, the inelasticity may assume two forms. The demand may be inelastic in the sense of being constant, so that it always remains the same; or it may be inelastic in the sense that any attempted increase completely destroys the demand. We shall thus have to consider three possible cases, taking up first, under the heads *A* and *B*, the two forms of inelastic demand.

A. If the tax is levied on a commodity which the consumers must have and which they are willing to pay for at any expense, the demand will not decrease. With such an invariable demand the price of the commodity will rise by just the amount of the tax. The consumer will thus bear the whole burden. Practically, this is true of only a few commodities. In a large number of instances, however, prices may rise considerably without greatly affecting the demand. Such would be the case to some extent, at least, with absolute necessities as well as with high-priced luxuries. The demand for the former is not apt greatly to diminish unless people starve. The effect of a tax on such commodities would rather cause a diminution in the more elastic demand for comforts, or in that for the less absolute necessities. But the demand for absolute necessities depends chiefly on the size of the population, not on the price of the article. In the class of high-priced luxuries, again, a tax, unless it be utterly exorbitant, is not likely to restrict consumption to any very great degree. Those who are generally willing to buy such luxuries are not quite so likely to be held back by any probable increase of price as the purchasers with a slightly lower standard of life. It may, in fact, be laid down as a general rule that in the case of necessities, as well as in that of expensive luxuries, great alterations of price go hand in hand with slight variations in demand; while in the case of moderate comforts, small changes of price are accompanied by considerable variation in demand.¹ In the former case, then,

¹ Most writers, like Walras, *Éléments d'Économie Politique Pure*, 2d ed., p. 519, fail to make this distinction, and contrast luxuries in general with necessities in general. Yet Cournot had already called attention to the similarity be-

that of absolute necessities and some expensive luxuries, under the imposition of exclusive taxes there will be less migration of capital from the industries concerned because profits tend to remain constant. The tax will, in the extreme case, be shifted in its entirety to the consumer.¹

What is only partly true, however, in actual life, of absolute necessaries and expensive luxuries, applies in a far greater degree to what are called complementary goods. For even in the case of luxuries there are generally some purchasers at the margin of doubt, who will be dissuaded from buying, and who will be tempted to substitute some other commodity if the price of the article rises. When, however, as frequently happens in industrial enterprises, we have two or more commodities which have to be joined in production to accomplish a desired result, the one supplements the other, and cannot be disused without serious loss. Familiar illustrations of such complementary goods are pen, ink and paper; needle and thread; cart and horse; bow and arrow.² Almost every industry on a large scale has its gradations of such complementary goods. Even here, of course, there is no insuperable bar to the use of substitutes. But the price of the complementary goods must rise far higher than would be the case with an ordinary commodity, before the purchaser will be driven to accept a substitute. Where a tax is imposed on one of two or more complementary goods, while

tween great luxuries and indispensable necessities in his *Principes Mathématiques*, pp. 162, 163, and in his *Principes de la Théorie des Richesses*, p. 306.

¹ Pantaleoni, *Trasmissione*, pp. 115, 116, asserts that when the limit of effective demand has not been reached, the tax will be divided between the producer and the consumer. His argument is that, since the producer's profits are decreased, he will transfer his capital to other industries. This great addition of capital will decrease profits all around, in the taxed as well as in the untaxed industries. Thus, the producer will get less profit than before.

This seems to be a mistake. It is, on the contrary, difficult to see why any capital should be transferred. So long as the limit of effective demand is not reached, the producers will not have their profits curtailed, because they can increase the price by the tax. Pantaleoni's argument thus appears to be defective.

² Cf. *The Positive Theory of Capital*, by E. von Böhm-Bawerk, book iii, chap. ix.

the other is exempt, we come very near to the conditions of inelastic demand. A tax on one of two complementary goods will thus tend to be wholly shifted to the consumer.

B. We take up next the other case of an inelastic demand, that, namely, where the price of a commodity before the imposition of a tax has already reached the limit of the effective demand, and where an attempt to increase the price by any portion of the tax would totally annihilate the demand. Although such cases are exceedingly rare in practical life, and represent a theoretical possibility rather than an actual fact, they deserve at least a passing mention. The commodity must be sold at the accustomed price, or not at all; the price cannot rise. In such a case the tax cannot be shifted: the whole weight of the tax will fall on the producer. This will, in the long run, involve a decrease in production. The old producers will lose, and no new capital will be invested. Even if the supply is diminished, however, the price cannot increase; for, by the supposition, consumers will prefer to forego consumption rather than pay a higher price. The net result will be a cessation of production with an intermediate loss to the owners of fixed capital in the business. Under no circumstances can such a tax be shifted.

C. If, thirdly, the demand is elastic, as in the case of minor luxuries and of all comforts,—that is, of the general mass of commodities,—in the sense that the old price before the imposition of the tax falls below what some of the consumers will in an extremity be willing to pay, while the new price, including the tax, exceeds what a part of the consumers can afford to pay, the tax will be divided between the consumer and the producer. The proportions in which this division will take place will depend, so far as this element is concerned, chiefly on the elasticity of the demand. The more persistent the demand, the greater is the proportion of the tax which the producer will be able to add to the price; the more sensitive the demand, the smaller the sum by which he will find it profitable to increase the price. In other words, the greater the elasticity of the demand, the

more favorable — other things being equal — will be the situation of the consumer.

All changes in price, however, depend ultimately on the relations between demand and supply. Having just discussed the variations due to the elasticity of demand, what shall we say about those due to the elasticity of the supply?

At the very outset, we may mention those comparatively insignificant cases in which no increase of the supply is possible. This would be true of old works of art, of choice wines of a particular vintage and of similar articles. No matter what the inducement may be, the supply is inelastic, since it cannot respond to any increase in the demand. Under such circumstances, the extent to which the tax will be shifted to the consumer will depend on the conditions mentioned above under *A* and *C*.

In ordinary cases, however, the supply possesses some degree of elasticity; but the conditions affecting elasticity of supply are somewhat more complicated than those affecting elasticity of demand. It may, however, be laid down as a general rule that the elasticity of supply depends on two considerations: first, the extent to which differential advantages of production affect the supply of the commodity; and secondly, the ratio of product to cost, or the law of return to which the industry is subject. When it is said that the elasticity of supply "depends on" these considerations, no attempt is made to prejudge the question whether it varies directly or inversely with these conditions. It is this problem to which we shall now address ourselves under the sixth and seventh heads of this chapter.

6. To what Extent do Differential Advantages of Production affect the Supply?

The distinction here drawn is between those cases where all portions of the supply of a given commodity are produced at practically the same cost, and those cases where a

part of the supply is produced at a certain cost, and another part at a different cost. The nature of this distinction demands attention before we proceed to the discussion of incidence.

Ordinarily producers differ either in ability or in opportunity. While all similar units in the supply of a given commodity sell at the same price, the superior skill of some employers, or the more favorable situation of some factories, or the more fortunate combination of external causes, enables some capitalists to produce more cheaply than others. If, now, we assume static conditions; if, in other words, we assume that both demand and supply remain stationary, that there is no change in population, and no alteration in the methods of industry, — under such conditions it is clear that the normal value of the articles will be fixed, not by the average cost of production, but by the cost of producing the most expensive unit. In other words, normal value will then tend to equal the highest cost of production. So long as the demand is sufficient to call into existence commodities produced at different costs, and so long as there is no alteration in relative supply and demand, the price will be fixed by the greatest cost; and those who produce more cheaply will benefit accordingly. As the price is fixed by the cost of producing the most expensive portion of the supply, the difference between the lowest cost and actual price, in any given case, — that is, the difference between the cost of producing the article under the most disadvantageous circumstances and that of producing it under the more favorable conditions, — constitutes the producer's surplus or profits.

Under conditions of actual life, however, this assumption is inadmissible. The real conditions are dynamic, not static. There is a continual movement going on, not only from the side of demand, through changes in the population as well as in the wants of the purchasers, but also from the side of supply, through alterations in industry. Under such changing conditions of actual life, the conditions are somewhat more complex.

The ordinary course of competitive industry may be portrayed as follows. At any given moment, the commodity is supplied by a number of producers, and sells in the market at a fixed price. The more efficient producer, or perhaps some newcomer in the field with more capital or with improved machines or with better facilities for marketing the product, endeavors to capture a larger part of the market by putting out an increased supply at a somewhat lower cost of production. The mere fact of this increase of supply will tend to depress the price; and although his percentage of profit may be smaller than it would have been at the old price, he expects larger total profits because of his ability to sell more than before. The increase of supply, at lower price, must manifestly injure the less efficient producer at the margin of profitable production. In every business, there are always some producers who are able just to "make both ends meet." Their machinery is antiquated, their capital has been depleted, their business activity and knowledge are no longer what they should be, and their former profits, if there ever were any, have now vanished. They may continue for a time to struggle along, hoping against hope, and may live on their capital, being content to bridge over the next few years without profit; or, if they have invested heavily in unsalable buildings and machinery, they may deceive themselves by a fallacious system of book-keeping, and through a neglect to charge up the items of depreciation of stock or machinery, may figure out a nominal profit; or, finally, if their buildings occupy a good site, they may count as profit what is really to be apportioned to rent, and their gains will accordingly accrue to them not as entrepreneurs, but as landowners. But in every case the day of reckoning is sure to come. Sooner or later the producer will find that he is getting no return on his industrial capital. He will cease producing that particular commodity; and his place will be taken by some more efficient entrepreneur.

All industrial progress consists of a continual change at the top and at the bottom of the line of producers. Fresh

capital is continually coming in; the discouraged are continually stepping out. Normal value, under dynamic conditions, therefore tends in the direction of cost of production under the most favorable, not under the least favorable, conditions; it tends towards lowest cost, not highest cost. The market price at any given moment is indeed, as before—that is, exactly as under the hypothesis of static conditions—fixed at the point of highest cost; for at any given moment there is always some unlucky producer under competitive conditions who furnishes a part of the supply at cost. Next year he will be crowded out, and his place will be taken by some one who can produce at lower cost. What under static conditions was a part of the necessary supply becomes under dynamic conditions a part of the actual, but temporary, supply.

In practical life, therefore, competitive profits are dynamic in their nature. They exist only because at any given moment some entrepreneurs can produce at a lower cost than those on the margin, or no-profit level; but this margin, or no-profit level, is itself continually changing, and, under normal conditions of progress, is continually receding. A large class of commodities—in fact, all competitive articles—are, then, produced under such conditions that the profits represent the result of differential advantages of production. These differences may be summed up under four heads: differences of situation with reference to the market, differences in the possession of improved machines or processes, differences in the personal abilities of the producers and differences in opportunity or luck.

Whenever all the articles in a given class are produced at the same cost, in fact, the resulting profits are monopoly profits and not competitive profits. Not only does profitable production at the same cost imply monopoly, but monopoly necessarily means production at identical cost. Let us consider the last statement first.

A monopoly may be in the hands of either a single producer or a combination of producers. If there is only a single monopolist, there can obviously be only a single cost

for the supply. If there is a combination of producers, the same conclusion does not, at first blush, seem to follow. There may be a combination, as a trust or pool, where the original differences of business ability or of opportunity among the producers subsist after the formation of the trust. The mere fact, however, that the least favorably situated producer enters the trust shows that prices are no longer fixed at the point of marginal cost, for otherwise he could not secure any profits. As a matter of fact, the ordinary agreement in a trust or pool provides for a lumping together of the expenses and the receipts of all members of the combination, and for an apportionment of profits according to a fixed percentage. Thus, although there is technically no production of all the units of the supply at identical cost, economically and so far as concerns the relation of the producers to each other the various parts of the supply may be said to be virtually produced at the same cost.

In the second place, profitable production at the same cost implies, in the long run, a monopoly. It may conceivably happen that in a régime of competition all the producers at a particular moment are men of precisely the same abilities, and subject to the same conditions. In this possible case—which is apt to be true only of newly started industries—there would, indeed, be only one identical cost for all units of the supply. There could then, however, not be any permanent profits to all the producers, because prices could not permanently remain above the mere cost of production. If there were profits to all the producers, competition would induce one of them to lower the price in the hope of securing larger profits through greater sales; or, if he did not do so, some new producer would enter the field and cut prices. The only way in which prices could be permanently kept at the old figures would be through some control of the supply. As soon as this condition came to pass, however, we should no longer have free competition, but should be in the presence of some form of monopoly. Thus not only does monopoly imply production at the same cost, but production

at the same cost involves some form of monopoly.¹ Competitive profits, on the other hand, as we have seen, imply varying costs of production.

In some competitive industries, however, the differential advantages are far greater than in others. Obviously, when these differential advantages are great, profits are high for the more efficient producer; when they are small, there is only a slight margin of profit. The older the industry, or the simpler the conditions of production, the smaller is likely to be the margin of profit. Furthermore, it must be remembered that where there are great differential advantages of production, profits are high because of the margin between the lowest cost of the most efficient producer and the price fixed by the supply of the least efficient producer. In case there are no differential advantages of production—which, as we have seen, tends to be true only of monopoly—profits are high because of the complete control of supply. The existence of profits depends here not upon any competitor, but upon the conditions of maximum monopoly revenue—that is, upon the elasticity of the demand and the ratio of product to cost.

Let us proceed now to discuss the influence of these conditions upon the incidence of taxation in industries subject to the law of competition.

The fact that high profits or moderate profits accrue to the more favorably situated producer depends, as has just been seen, upon the differences in the cost of producing the various parts of the actual supply of a commodity.² If all the incre-

¹ Pantaleoni, *Trasmissione dei Tributi*, who bases his treatment of the taxation of profits on what appears to be an exaggerated distinction between ordinary profits and surplus profits, fails to recognize the fact that industries in which all the articles are produced at the same cost are necessarily monopolies. Graziani, *Istituzioni di Scienza delle Finanze*, pp. 342-344, seems unhesitatingly to follow Pantaleoni in these points.

² Professor Carver, in his interesting article on "The Shifting of Taxes" which was published in *The Yale Review*, v (1896), p. 266, calls attention to this point. He puts the conclusion in somewhat different language, in saying that "the elasticity of the production or supply depends upon the extent to which rent enters into the production of the article in question." By rent he obviously means the

ments of the supply are produced at a cost which varies but little from the market price, not only will all profits be small, but any appreciable increase of cost due to the imposition of a tax will tend, ordinarily, to bring about a diminution in the amount produced, because it will trench on the narrow margin between cost and price. A tax will be likely, therefore, by limiting the supply, to raise price. Under such conditions, the consumer will tend to bear more of the burden.

On the other hand, if the margin between cost and price is considerable, and if the more favorably situated producers earn large profits, a tax will bring about a relatively smaller decrease in supply, and the augmentation of price to the consumer will tend to be less. In such cases, since the margin between the price and the cost for the most favorably situated producer is so great, the influence of the law of increasing cost, referred to in the next section,¹ will not be felt to such a degree at first; that is, there is greater likelihood that the more capable producers will be able to fill the gap caused by the cessation of production on the part of the less efficient producers. There may even be no decrease at all in the supply, the only difference being that the level of marginal cost is now, with a part of the tax added, a little higher than before. The effect of a tax may then be to ruin the less efficient producers, although the more favored producers will no doubt also have their profits somewhat curtailed; but a smaller part of the tax than before will be shifted to the consumer.

It was stated above² that the elasticity of supply depends not only upon the extent to which differential advantages of production enter into the supply, but also on the ratio of product to cost. Having discussed the first condition, we come now to the second.

result of differential advantages of production. Professor Carver's statement is to be criticised, however, because of his inattention to the other point which affects elasticity of supply—namely, the ratio of product to cost—which is discussed below.

¹ Below, p. 202.

² See p. 192.

7. *Is the Article supplied at a Constant, an Increasing or a Diminishing Cost?*

It is well known that in certain occupations, or under given conditions, every successive application of capital or labor gives returns of approximately constant amount. The product is then in exact ratio to the amount of capital or labor applied, and the industry is said to be subject to the law of constant returns. The normal value of an article which is thus reproducible at a fixed cost tends to be equal to the cost of production.

In certain occupations, however, every successive application of capital gives returns, not of the same, but of a continually smaller amount. The industry is then said to be subject to the law of diminishing returns, or of increasing cost. This condition is normally true of agriculture, and forms the basis of the Ricardian law of rent. How far it is applicable to industry in general after a certain stage of profitableness has been passed, we shall see in a moment. On the other hand, the industry may obey, up to a certain point, the law of increasing returns or of diminishing cost. For instance, where in any industry the proportion of fixed or constant expenses to total expenses is large, a considerable increase of production can often be made without a corresponding increase of cost. Successive applications of capital and labor thus tend to produce returns which are, to a certain point, increasingly greater in amount. The product is not proportional, but progressive.

Although this conception of the laws of constant, increasing and diminishing returns is an old one, their application to the facts of actual life is often misunderstood. The law of constant returns is generally assumed to be the normal law, while the laws of increasing and diminishing returns are supposed to be the exceptions. A more careful consideration, however, shows that in ordinary competitive enterprises the law of diminishing returns is the normal law. This has usually been recognized as true of agriculture; but

it is equally true of other occupations. In order to show this clearly, let us examine somewhat more closely what is the real import of the laws of diminishing and of increasing returns.

The action of the law of diminishing returns manifests itself in two ways. The fact that after a certain point has been reached production does not respond proportionately to the energy applied, and that every new "dose" of capital and labor gives less and less returns, is familiar to all engaged in ordinary agricultural operations. The soil may be prevented from deterioration by the skilful use of manures; it may even be improved through the discovery of newer methods of cultivation; but the point must soon come when the increase of production will be overtaken by the increased application of capital and labor, and when the returns, as compared to the expenditure of capital and labor, will diminish. The second way in which the law may work itself out is generally illustrated by a mine. Here, although the returns may seem to be constant from year to year, the capital itself which yields the returns is being slowly consumed. At the end of a given period, not only will the returns themselves abruptly stop, but the possibility of securing additional returns in the future will also have disappeared. We must, therefore, abstract from each recurring return a sum which, when capitalized at the rate of production, will ultimately amount to the total original capital. Translated into ordinary business language, we must allow for depreciation of stock or plant—a depreciation which, when continued long enough, will entirely consume the initial capital. In the first case of diminishing returns, then, typified by agricultural land, the actual produce becomes yearly less; in the second case, illustrated by mining or badly conducted forestry, the nominal produce may remain the same, but the actual return on the investment of capital becomes continually smaller. In both cases, therefore, the cost is a proportionately increasing one.

When we take up the law of diminishing cost or increasing returns, we likewise find that it assumes two forms in ordi-

nary industry. The one great cause of increasing returns is what may be termed concentration ; the other may be termed natural selection. How do these operate ?

The economies of production, due to the concentration of smaller enterprises into a large concern, have been made familiar in recent years. In all enterprises where the investment of capital is considerable, the proportion of constant expenses to variable expenses is apt to be large. Some expenses necessarily grow with every increase of business ; other expenses remain the same, whether the business is large or small. In fact, certain expenses will be actually smaller with large transactions concentrated into one hand, than with an equal amount of transactions distributed through a variety of producers. Up to a certain point, then, it is possible that an increase of capital and labor will give more than proportionate returns. We say, up to a certain point, — because we must assume that here also a time must come when the law of diminishing cost loses its efficacy ; for we should otherwise get the absurd result of production without any cost at all.

But concentration is not the only cause of increasing returns. There is, under competitive conditions, as we pointed out above, a continual tendency for the less efficient producer to be crowded out by the more efficient. The marginal producer — he who is just able to keep his head above water — is, under ordinary conditions of industrial progress, thrown back into the ocean of failure and despair ; his place is taken by a more successful competitor, a new marginal producer who, for a time, continues to exist because he can produce more cheaply, but who is himself soon forced to succumb. This continual weeding out, to change the metaphor, of the unfortunate or the incompetent is equivalent to the process of natural selection. The community gains, because it enjoys the services of the more efficient producer ; and this greater efficiency shows itself in the increasing ratio of output to every new investment of capital. Thus, where industry is not stationary or retrograding, the natural selection of entrepreneurs means production at a diminishing cost.

If we attempt now to analyze the facts of actual business life, we shall find that the forces which make for diminishing returns and those which make for increasing returns are combined in different proportions in various enterprises. Upon the extent to which they are combined depends the trend toward monopoly or toward competition.

Suppose, for instance, that in any enterprise the economies resulting from concentration, and the lower cost due to natural selection of the producers, are just about counterbalanced by the difficulties of securing additional room for production, or by drawbacks connected with the marketing of an increased output. In such a case, where the forces making for increasing returns and those making for decreasing returns are evenly balanced, the result will be production according to the law of constant returns. Under such conditions, however, there is no obvious reason why the more efficient producer will not be able to increase his output and thus gradually to crowd out his less efficient competitors until he secures a monopoly. Although he produces at constant cost, and his percentage of profit remains the same, his total profits will grow with the increase of production. There is no rigid limit to the increase of output; the more efficient the producer, the greater the ease with which he will be able to command sufficient additional capital to expand his business. The law of constant cost, therefore, presupposes an industry on the high road to monopoly.

Suppose again that, instead of being subject to the action of the law of constant returns, the industry obeys the law of increasing returns or diminishing cost. Here it is plain that the trend will be still more strongly toward monopoly. Unless the returns are unequally increasing, so that the less favorably situated producer can still hold his own with the more fortunate producer, and thus continue to furnish an actual part of the supply, the more efficient producer will quickly — more quickly than in the preceding case — gain control of the market. When the conditions are such as to realize the economies of natural selection, the tendency

toward monopoly is a strong one. When the economies of natural selection are joined to those of concentration, the tendency toward monopoly is accelerated. It is precisely because in modern times the forces working toward diminishing returns have, in so many instances, been overtaken by man's mastery over nature that we notice the well-defined movement toward trusts, pools and combinations.

It is plain, then, that the law of constant returns, and still more the law of increasing returns or diminishing cost, is unfavorable to the persistence of competition. The normal law of competitive industry, under static conditions, is the law of diminishing returns or increasing cost; and even under conditions of actual life—that is, under dynamic conditions—a competitive industry may be said to obey the law of constant or of increasing returns only during a period of transition. Constant returns and, to a still greater extent, increasing returns or diminishing cost, tend toward monopoly. It is only at a given time, and in a given industry which is in the process, slow or fast, of being monopolized, that the laws of constant or of diminishing cost can prevail. When once the complete monopoly has been reached, the industry may obey the law of diminishing, constant or increasing cost according to the conditions of the particular case. But the chances of the continuance of the monopoly will be more secure when it obeys the law of constant cost rather than of increasing cost or diminishing returns; and they will be still more secure when the monopoly obeys the law of diminishing cost or increasing returns.

If we now extend this analysis to the subject of incidence of taxation, we shall see that the action of the laws of diminishing and increasing returns differs according as we deal with cases of competition or of monopoly. The elasticity of the supply is affected in opposite ways by the ratio of product to cost, according as the industry obeys the law of monopoly price or of competitive price. Let us proceed to show this in detail, taking up first the case of monopoly.

If a monopolized industry is subject to the law of constant returns so that the cost of production is the same for all, irrespective of the quantities produced, the first tendency of the producer will be to add the entire tax to the price. But as this would, in the normal condition of an elastic demand, decrease sales he will increase the price by something less than the full amount of the tax. If the demand falls off greatly with every increase of price—or, in other words, if the margin of effective demand is small—the price, as we have seen, will be increased by much less than the amount of the tax, and the producer will suffer most of the loss. Conversely, if the demand is not so elastic,—if an increase of price will produce only a small decrease of demand,—a larger proportion of the tax will be added, and the consumer will suffer more than the producer.¹ But so long as there is a given decrease of the demand, the increase of price will bear a given proportion to the amount of the tax. The producer will find his greatest profits—even if now reduced below their old level—at a given point of smaller sales at a higher price.

If, however, an industry obeys the law of increasing returns or diminishing cost—where each increment in the amount produced costs less than the last—the tendency of the producer, in the face of an elastic demand, will be to add less of the tax to the price than in the preceding case of constant returns. For, as soon as he adds any given part of the tax to the price, he will normally decrease consumption. But, if he produces less, each unit will, on the supposition that he has been producing under conditions of increasing returns, cost him, exclusive of the tax, more than before. The less he produces, the greater will be his percentage of cost. The attempt to add more than a given part of the tax to the price will be doubly disastrous to him; for not only will his sales fall off, but his percentage of cost will increase on the actual sales that he still makes. In the preceding case of constant cost the producer who has advanced the tax will increase his

¹ For a formal proof of this see below, pp. 276–278. Cf. above, p. 191.

price only to that point where the smaller sales are compensated by the higher price, so that his net profits will still be at the maximum. But under the régime of increasing returns or diminishing cost, the point at which price will find its level is a little lower down on the scale; for since every curtailment of the market means to him not only reduced sales but a higher percentage of expenses, he will seek to restrict the output as little as possible, in order that the proportion of net receipts to gross receipts may remain at its highest point.

The producer will thus find it profitable to bear more of the tax himself than in the preceding case of constant cost. The extent to which he will bear a greater portion of the tax will depend, given a certain intensity of demand, on the degree to which cost increases with restriction of output. The more his percentage of expense grows, the less will he be tempted to advance the price. If a high tax, for instance, be imposed on the passenger tickets of a railway, subject to the law of increasing returns, where the most profitable business happens to be the passenger traffic and where an increase of fares would mean a perceptible falling off in travel, the resulting abandonment of several passenger trains a day would mean a considerable increase of the percentage of fixed to operating expenses, and therefore a great fall of profits. The railway will therefore add as little as possible of the tax to the fare. The less important the passenger traffic, the weaker will, of course, be the action of the law of increasing returns, and the greater will be the inducement for the railway to add more of the tax to the fare. Under ordinary conditions, therefore, in the case of a tax on a monopolistic industry subject to the law of increasing returns or diminishing cost, the tendency is that the consumer will suffer less than in the case of an industry subject to the law of constant cost.

On the other hand, if the monopoly obeys the law of diminishing returns or increasing cost — where each additional increment of production costs more than the last —

the producer will be likely to add more of the tax to the price than in the case of constant or increasing returns. For although the increase of price consequent upon the imposition of any part of the tax will decrease consumption, each unit of this smaller output will, on the hypothesis that he has been producing under conditions of diminishing returns, cost the producer, exclusive of the tax, less than before. His inclination to pay less of the tax himself will be strengthened by the fact that, although the sale of fewer articles at the higher price may cause a reduction in his gross receipts, the percentage of profit on the smaller output will be greater, and will thus yield him higher net receipts. The extent, again, to which the producer will add more of the tax to the price than in the case of constant cost depends on the rapidity with which the percentage of cost increases with every unit of output.

So much for the régime of monopoly. On the contrary, when we deal with industries subject to competitive conditions, the relations are just the reverse. We have seen¹ that the normal law, in the case of competition, is that of diminishing returns, and that competitive industries obey the laws of constant or of increasing returns only in cases of transition. But for the sake of uniformity we may here again, as in the former case of monopoly, take the law of constant returns as the starting-point of our analysis.

The great distinction between competition and monopoly is that under conditions of competition, although the price of a commodity continually tends toward the point of lowest cost, it is fixed at any given moment at the point of marginal or of highest cost; while under conditions of monopoly there is no marginal cost, because there is no marginal producer. The application to the problem of incidence of taxation is obvious. If the competitive industry obeys the law of constant cost, the extent to which a tax will increase the price depends, other things being equal, primarily on the nature of the demand curve. The more persistent the demand, the greater,

¹ Above, pp. 202-203.

as we have seen, is the proportion of the tax which the producers will be able to add to the price. If a competitive industry, however, obeys the law of increasing returns or diminishing cost, which as we have learned is true only of periods of transition, the tendency of the producer will be to add more of the tax to the price than in the case of constant returns. For any increase of price due to the tax will tend to decrease consumption. If he produces less, however, each unit will, under the assumption that he has been producing under conditions of increasing returns, cost the producer, exclusive of the tax, more than before. But if he remains a marginal producer, the price must finally find its level at this point of higher cost to the marginal producer. In other words, the price will tend to rise to a point higher than in the case of constant returns. Of course, if he does not continue to compete, but is crowded out by the abler producer, who can more easily capture the market under conditions of increasing returns, this result does not necessarily follow. It may happen, for instance, that the more favored producer will take advantage of the tax to drive the old marginal producer out by adding only a small part of the tax to the price, hoping to recoup himself by an ultimate monopoly; and then, when he secures a monopoly, he may put the price up again. But granting a continuance of the competitive conditions, with the old marginal producer still supplying his share of the output, the addition to the price, as long as the competition lasts, will tend to be greater than in the case of constant returns. It must continually be borne in mind that under the régime of competition price always equals marginal cost; whatever increases this marginal cost increases price. The action of the law of increasing returns tends to augment the marginal cost for the smaller output which results from the imposition of a tax; therefore it tends to increase the price.

If the competitive industry, on the other hand, obeys, as is usually the case, the law of diminishing returns or increasing cost—where each increment in the amount produced costs

more than the last—the producer will be likely to add less of the tax to the price than in the case of constant or diminishing cost. For although the increase of price consequent upon the imposition of any part of the tax will decrease consumption, each unit of this smaller output will, on the hypothesis that he has been producing under conditions of diminishing returns, cost the producer less than before. Since price is fixed, under competitive conditions, at any given moment at the point of greatest cost, and since the cost to the marginal producer who remains a competitor is reduced, the price will now be a little lower than in the case of constant returns, and still lower than in the case of increasing returns.

In all these cases—whether of competition or of monopoly, whether of constant, of increasing or of diminishing cost—the important point remains, as before, the elasticity of the demand. But given a certain elasticity of demand, we see that in the case of monopoly the tendency is that less of the tax will be shifted to the consumer when the industry obeys the law of diminishing cost or increasing returns, and that more will be shifted when it obeys the law of increasing cost or diminishing returns; but that in the case of competition the facts are reversed, and that more of the tax will be shifted to the consumer when the industry obeys the law of diminishing cost or increasing returns, and that less will be shifted when it obeys the law of increasing cost or diminishing returns.¹

¹ The argument in the text may be illustrated by diagrams. Take first the case of competition. In Fig. 1, let DD' be the demand curve. Let OX be the amount of product; let OY be the line of price; let OL be the marginal cost before the tax, corresponding to the supply curve $S'S$; let LC be the amount of tax added to the price under the law of constant returns, so that the price after the imposition of the tax is OC , corresponding to the new position of the supply curve TT' . If OM is the amount produced at the original price OL , giving gross receipts of $OLSM$, the amount produced after the price has been raised to OC will be OM' , giving gross receipts of $OCT'M'$.

If the industry obeys the law of diminishing cost, as in Fig. 2, the line $S'S$ will be curved downward. Before the tax is imposed, the quantity OM will, as before, be sold at the price OL or MS . But after the tax is imposed, equilibrium will be attained when the new supply curve TT'' intersects DD' , which will in this case

This is, on the whole, a comforting doctrine to the consumer, because, as we have seen, the condition most favorable to a monopoly is that of decreasing cost or increasing returns,

be somewhat to the left of the old point of intersection; so that now the quantity OM'' will be sold at the price $M''T'$ or OE , which is higher than OC .

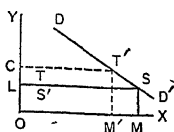


FIG. 1.
Constant Returns.

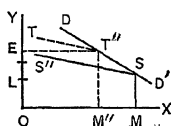


FIG. 2.
Increasing Returns
or Diminishing Cost.

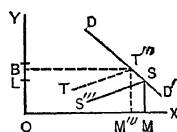


FIG. 3.
Diminishing Returns
or Increasing Cost.

If the industry obeys the law of increasing cost, as in Fig. 3, the line $S''S$ will be curved upward. Now, after the imposition of the tax, the price will be fixed at the point T''' , so that the quantity OM''' will be sold at the price $M'''T'''$, or OB , which is lower than OC .

The extent to which in any case the new price, after the imposition of the tax, exceeds the old price OL depends primarily upon the elasticity of the demand, that is, the sharpness of the curve DD' ; but starting out from this increase of price under the law of constant cost, diminishing cost adds more to the price, increasing cost adds less to the price.

Under conditions of monopoly, however, price is fixed not at marginal cost, but at the point of maximum monopoly returns. This depends upon the margin between cost and price.

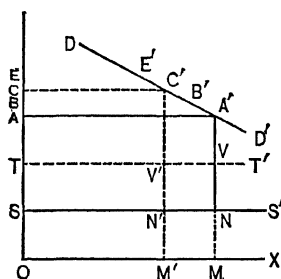


FIG. 1.
Constant Returns.

In Fig. 1, where we have the law of constant cost, let everything be as before, except that OS is the cost per unit, the line SS' the line of constant cost. Given the demand curve DD' , the monopolist will find the point of maximum net re-

will be shifted to the consumer than under any other proportions in the ratio of product to cost.

Combining the conclusions reached under divisions 6 and

an output of four units, OM' of three and one-half, OM'' of three, OM''' of two and one-half. Let the distance from A to B , B to C , and C to E , be one-fourth. Let OA be a price 3, so that OB is $3\frac{1}{4}$, OC is $3\frac{1}{2}$, and OE is $3\frac{3}{4}$. SA will then be 2, SB $2\frac{1}{4}$, SC $2\frac{1}{2}$, SE $2\frac{3}{4}$. Under the law of constant cost, before a tax is imposed, monopoly profits will then be:—

At price E$	. . . . .	2.75 \times 2.50 = 6.875$
At price C$	. . . . .	2.50 \times 3 = 7.50$
At price B$	. . . . .	2.25 \times 3.5 = 7.875$
At price A$	. . . . .	2 \times 4 = 8$

that is, the monopolist will prefer price A .

If a tax of ST or 1 is imposed, monopoly profits will be:—

At price E$	. . . . .	1.75 \times 2.50 = 4.375$
At price C$	. . . . .	1.50 \times 3 = 4.50$
At price B$	. . . . .	1.25 \times 3.50 = 4.375$
At price A$	. . . . .	1 \times 4 = 4$

that is, the monopolist will prefer the price C .

If the industry obeys the law of diminishing cost or increasing returns, the surplus of price over cost will no longer be as before 2, $2\frac{1}{4}$, $2\frac{1}{2}$, and $2\frac{3}{4}$, but, let us say, 2, 2.20, 2.35, and 2.40; that is, with every unit of smaller output, the cost will be progressively greater, and the surplus of price over cost will be progressively less. Thus, before the tax is imposed, monopoly profits will be:—

At price E$	. . . . .	2.40 \times 2.50 = 6$
At price C$	. . . . .	2.35 \times 3 = 7.05$
At price B$	. . . . .	2.20 \times 3.50 = 7.70$
At price A$	. . . . .	2 \times 4 = 8$

that is, the monopolist will, as before, prefer price A .

After the imposition of the tax, monopoly profits will be:—

At price E$	. . . . .	1.40 \times 2.50 = 3.50$
At price C$	. . . . .	1.35 \times 3 = 4.05$
At price B$	. . . . .	1.20 \times 3.50 = 4.20$
At price A$	. . . . .	1 \times 4 = 4$

that is, the monopolist will now prefer price B , which is lower than price C .

Finally, if the industry obeys the law of increasing cost or diminishing returns, with every unit of smaller output the cost will be progressively less, and the surplus of price over cost will be progressively greater; instead of the surplus being as before 2, $2\frac{1}{4}$, $2\frac{1}{2}$, and $2\frac{3}{4}$, it will be, let us say, 2, 2.27, 2.55, and 2.90. Then, before the tax is imposed, monopoly profits will be:—

7 of this chapter,¹ it is evident that elasticity of supply — by which we mean the responsiveness of the quantity produced to fluctuations in price — depends on a combination of two factors: the degree to which differential advantages of production exist, and the ratio of product to cost. The influence of this ratio of product to cost is, as we have seen, different in the case of monopoly from its influence under conditions of competition. In both cases, however, the greater the chance that the imposition of a tax will cause a diminution of supply, the less favorable will be the situation of the consumer; the smaller the prospect of a decrease in the supply, the more favorable will be his position.

We may therefore sum up this part of the discussion that has been carried on under divisions 5, 6 and 7, as follows: The degree to which a tax on a particular commodity will be

At price <i>E</i>	. . . . .	$2.90 \times 2.50 = 7.25$
At price <i>C</i>	. . . . .	$2.55 \times 3 = 7.65$
At price <i>B</i>	. . . . .	$2.27 \times 3.50 = 7.945$
At price <i>A</i>	. . . . .	$2 \times 4 = 8$

that is, the monopolist will, as before, prefer price *A*.

After the imposition of the tax, monopoly profits will be: —

At price <i>E</i>	. . . . .	$1.90 \times 2.50 = 4.75$
At price <i>C</i>	. . . . .	$1.55 \times 3 = 4.65$
At price <i>B</i>	. . . . .	$1.27 \times 3.50 = 4.445$
At price <i>A</i>	. . . . .	$1 \times 4 = 4$

that is, the monopolist will now prefer price *E*, which is higher than price *C*.

In the first edition of this work (pp. 151, 152) the reasoning was applied only to cases of competition. Professor Marshall, likewise, in his interesting discussion (*Principles of Economics*, book v, chap. xii, § 4, p. 524 of 3d ed.) deals only with cases of competition. In the following chapter, where he treats of monopolies, he does not specifically discuss the action of the law of increasing and diminishing cost. On the other hand, Professor Edgeworth fails to make the distinction between the cases of monopoly and of competition. In the case of competition, he agrees with the view here presented (cf. *Economic Journal*, vii, pp. 69, 70); but he thinks that the result is the same in the case of monopoly (*ibid.*, pp. 236, 237, and p. 406, note 4). Professor Edgeworth's demonstration, like the statement of Cournot, rests upon an assumed mathematical proof, the accuracy of which must be left to those versed in the higher mathematics.

¹ See above, pp. 192 and 199.

shifted to the consumer will vary inversely as the elasticity of the demand and directly as the elasticity of the supply. The elasticity of demand depends upon the extent to which the commodities in question are removed not only from the category of complementary goods, but also from that of absolute necessities or of high-priced luxuries. The elasticity of supply depends upon the extent to which differential advantages affect the production, as well as upon the ratio of product to cost. This ratio of product to cost, again, influences the shifting of the tax in opposite ways in cases of monopoly and of competition respectively. It may be laid down as a general law that when the demand is more elastic than the supply, the consumer will bear a smaller part of the tax than when the supply is more elastic than the demand. Whether a tax will be shifted in its entirety, in part, or not at all, depends on the article itself, on the degree to which other articles may be substituted for it, on the size of the margin of profit, and on the degree to which monopoly enters into the nature of the industry on the product of which the tax is laid. For the working out of this law in practice, the reader is referred to the succeeding chapters of the present work. The effect of a bounty will naturally be the reverse of a tax.

These statements, so far as we disregard the limiting or opposing forces referred to in division 1 to 4 above,¹ contain the general law of shifting. We need still to discuss, however, a few considerations, limiting the general law, which are often of considerable practical influence in actual life.

8. *Is the Tax imposed on Margin or on Surplus?*

When we say that the price of a commodity under the law of competition is fixed by the cost of production, we refer to the cost of producing the most expensive portion of the actual supply. This must not, however, be misunderstood. As was already stated, the tendency of prices is to gravitate

¹ See pp. 181, 186 and 187.

toward the cost of producing the least expensive, not the most expensive, part of the supply. Through the processes both of concentration and of natural selection, the least efficient producers are continually being crowded out, and the price of the product is continually being reduced — up to that point, at all events, were there is no possibility of further economies. But while the tendency is thus in the direction of lowest cost, the temporary equilibrium between demand and supply at any given moment adjusts itself at the point of highest cost. In any given season, when a commodity is sold, there is under competitive conditions a producer who just gets back his cost, because his cost is equal to the price at which the whole supply is sold. In this sense he is the marginal producer, his product is the marginal product, and the price of the whole supply is fixed at the point of the cost of the marginal product.

It is clear, now, that if a tax is imposed it will increase the cost of this marginal product, and provided that the marginal producer continues to produce and to remain the marginal producer, the price of the whole supply will be raised by the amount of the tax. To the extent that the marginal producer is crowded out, a smaller proportion of the tax will be added to price.

It may happen, however, that the tax does not hit the marginal product at all. This may be due to two causes. In the first place, the tax may be imposed on product, but it may reach only other portions of the supply than the marginal portion. In the case of interstate or international competition, for example, one state may tax that part of the supply produced within its borders, while the price may be fixed in the international market, where the most expensive increment of the supply comes from a country which imposes no tax. The tax assessed in the first state will thus not reach the marginal product, and will produce no effect on the price. Not until the tax is so high that the increased cost of this portion will relegate it to the position of the marginal product can the tax influence the price.

Secondly, a tax may not reach the marginal product, because it is not imposed on production at all. It may be imposed, not on production, but on the results of production. In order that any change may take place in price, there must be, as we have seen, some alteration in the supply. A tax on the marginal product would obviously at once tend to cause such an alteration in the supply. But if the tax is imposed on what accrues to the producer after all his expenses are deducted and his accounts closed, the tendency to an alteration in the supply will be diminished. The surplus above all expenses is either rent or profits. Economic rent and pure profits are the results of price, not conditions of price. A tax on surplus, therefore, would not reach the marginal product at all, and would not tend to cause any change of price. It is only through the slower and more indirect influence of a general fall in profits that any alteration, if at all, would take place. The greater the extent, therefore, to which the tax falls on surplus, instead of on margin, the smaller the chance of any shifting of the tax.

9. *Is the Tax Large or Small?*

From the point of view of pure theory it might seem immaterial what the rate of tax is; for however slight the charge might be, it would still be mathematically measurable. But in practical life individuals often observe the same principle that is expressed in the legal maxim *de minimis non curat lex*. A producer who is called upon to pay a very small tax which would, under ordinary conditions, be shifted to the consumer, may prefer to assume it himself rather than to run the risk of annoying his customer about what is after all a trifle. Or the price of the commodity may be fixed by custom, so that the producer will not dare to risk loss by any addition to the price. A good example of the first case is the small tax imposed by the United States in 1898 on parlor-car tickets. Rather than annoy the passengers, the companies have assumed the tax. An equally good example of the

second case is the small additional tax imposed by the United States at the same time on certain brands of cigars and tobacco, which continued to sell at the same price after the imposition of the tax. As a former five-cent cigar or five-cent package of tobacco could not have been sold at five and a half or six cents, the only way in which the producer could escape the tax was through a deterioration of the article. How far competition would permit him to do this is uncertain. In all such cases the unit on which the tax is imposed is of importance.

On the other hand, it is equally true that a very small tax may, in certain cases, make little difference to the consumer. The elasticity of the demand may not be appreciably affected. Under such conditions a producer who would otherwise be tempted to bear the tax for fear of losing the trade will have no scruples in adding the tax to the price.

10. *Is the Tax Proportional or Graduated?*

The considerations hitherto advanced as to the normal consequences of the imposition of a tax depend on the hypothesis that the tax is proportional. Since a graduated tax is the rare exception rather than the rule in practical life, those conclusions are in general valid. But we occasionally find — with increasing frequency in modern democracies — that the rate of a given tax is graduated, instead of being proportional. In almost all such cases the rate is graduated upward, so that the tax is progressive; in very rare instances the rate decreases with the amount assessed, so that the tax is regressive.¹

Where such a tax is assessed on surplus instead of on margin, our conclusions respecting the shifting of a tax require little, if any, modification. Whether inheritances, for instance, are taxed proportionally or progressively cannot alter the fact of the non-transference of the tax. But

¹ For a fuller discussion of these terms, see Seligman, *Progressive Taxation in Theory and Practice*. New York, 1894, pp. 8-12.

when a tax is imposed on the marginal product — for instance, on gross product or on gross receipts — it is obvious that a progressive rate may completely alter the normal conditions of profitability. Under ordinary conditions, a proportional tax which reaches the marginal product tends to increase the price, as we have seen, by increasing the cost of this marginal product. But a progressive tax may be so arranged that it will increase the expenses of the more favorably situated producer far more than those of the one who has hitherto been the marginal producer. It depends upon the extent of the progression whether the former marginal producer now becomes the favored producer or not. It may easily happen that a progressive tax on product in general will not reach the margin at all. Where a proportional tax would exert a decided influence on cost, a progressive tax may exert, therefore, a far smaller influence. If a progressive tax be levied on the buyer instead of on the seller, the result may be just the reverse. In other words, the incidence of a graduated tax is often less predictable than the incidence of a proportional tax. In the remainder of this work, unless the contrary is definitely asserted, we shall always use the word "tax" in the sense of a proportional tax.

II. *Is the Commodity taxed a Final Good or merely an Intermediate Good?*

The entire discussion thus far has proceeded on the assumption that the commodity subject to the tax is disposed of by the owner, without considering whether the owner is the original producer or not. Without the phenomena of exchange, however, the conditions which affect the demand or supply cannot be present. Moreover, if the commodity subject to the tax has reached its final owner, to be consumed by him — no matter how protracted the period of consumption — there is no opportunity for setting in motion the forces that affect price. Once the tax has been shifted to the consumer, it will remain there. On the other hand, if the com-

modity is consumed productively, instead of unproductively, the user is no longer the ultimate consumer; the commodity in question is only an intermediate good, not a final good; and the whole case is reopened.

In studying the consequences, therefore, of any particular tax in its practical operation, we must bear in mind not only the normal theory, but the limiting conditions. In order the better to prepare ourselves for the study of their application, let us sum up these principles.¹

1. The more durable the thing taxed, the larger will be the series of annual payments demanded by the tax, and the more disastrous will be the weight of future payments when shifted back upon the initial proprietor by future owners.

2. If the object is monopolized, the price is not fixed by any marginal product; hence the tax will not be shifted so easily as in the case of the increased cost of a marginal product.

3. The more general or the less exclusive the tax, the narrower the taxless field to which the producers concerned can migrate; hence the greater the incentive to bear the burden themselves.

4. If the capital is fixed, or if there is any obstacle to perfect mobility, the shifting will be slighter and tardier than otherwise.

5. If the demand is persistent, the producers will roll the tax upon the consumers through a rise in price. But if the demand is sensitive, the producers will bear more of the tax, or else some will migrate.

6. If different parts of the supply of a commodity are pro-

¹ It sometimes happens that a review of an author's book puts the points made by him in a new light. So Professor Ross, in his account of the first edition of this work, brought together the various principles laid down therein but scattered through the different chapters. In so doing, he has greatly clarified the whole exposition. See his essay, "Seligman's Shifting and Incidence of Taxation," in the *Annals of the American Academy of Political and Social Science*, iii (1893), pp. 444-463. The statement in the text differs, however, in some important points from that of Professor Ross.

duced at greatly varying costs, the less efficient producers will be ruined by a tax which the abler producers can readily pay.

7. If the commodity is supplied at decreasing cost, the tendency is that where we have competition the consumer will be likely to suffer more than in the case of an industry subject to the law of constant or increasing cost; but that where we have monopoly, he will be likely to suffer less. Since the law of decreasing cost is more favorable to monopoly, it follows that a monopolist is less likely to shift a tax than is a producer under competitive conditions.

8. To the extent that a tax reaches the surplus rather than the margin, shifting will be less likely to result, since the marginal product is the price-fixer.

9. The smaller the tax, the less will be the disarrangement in the equilibrium of supply and demand, and the slighter will be the normal action that will produce or prevent shifting.

10. If the tax is graduated instead of proportional, the tendency toward shifting will be accentuated or weakened according to the rate of the progression or regression.

11. If the object is a final good, a tax once shifted to the consumer will stay there. But if it be a commodity used in further production, the whole case is reopened, and all the other conditions may come in to determine whether or not the tax shall be shifted to the second, the third or the final consumer.

CHAPTER II

TAXES ON AGRICULTURAL LAND

THE assertion is frequently made that the American farmers are taxed out of all proportion to their ability to pay. This is due chiefly to the fact that they have to assume to a large extent the burdens of other taxpayers. Outside of the rural districts the great mass of personal property consists of intangible personalty, which, as a rule, escapes taxation almost completely. In the rural districts, on the other hand, the great mass of personalty consists of visible tangible property used by the agricultural communities. The country landowner, who is generally assessed also on his visible personalty, must thus pay, over and above his just proportion of the public dues, an additional share which ought to have been assumed by the owners of intangible personalty. What is a real property tax in the rest of the state becomes a general property tax for the farmer.¹

The force of this contention is denied in the commonly accepted doctrine that the tax on the farmer's property is diffused throughout the community. The farmer, it is said, will add the tax to the prices of the products of his farm, and will in this manner recoup himself for his original outlay. The tax will thus be shifted, so runs the argument, from the producer to the consumer; since every one is a consumer, the tax will virtually fall on the community at large, and is hence a just and equal tax.

This argument is not a strong one, although, strange to say, its chief weakness has not hitherto been pointed out.

¹ Cf. the article on "The General Property Tax," in Seligman, *Essays in Taxation*, pp. 27-33.

Even granting for the moment that the tax will be shifted in its entirety, by being added to the prices of agricultural products, it would fall on individuals only so far as they were consumers of these products. In other words, if this were the only tax, it would be a tax on consumption—that is, on expense.¹ Now, of all bases of taxation expenditure is undoubtedly the least equitable. What a man spends is no criterion of what he is able to contribute to the burdens of the state. It bears no fixed proportion to taxable capacity. Whatever other tests we may have of individual faculty—whether property, product or income—not one of these has any definite relation to expenditure. If one man has triple the property or income of another, but, whether through thrift or miserliness, spends only the same amount, it surely cannot be said that the taxable capacity of the latter is equal to that of the former, especially if the latter spends up to a very narrow margin of his revenue, as frequently occurs. In the one case there is available for future exigencies a reserve fund which is entirely lacking in the other, that completely alters its owner's obligations to the community. Moreover, it is a well-known fact that differences in expenditures are rarely so great as differences in property or income. A tax on consumption alone would, therefore, fall with increasingly crushing force on all those classes whose expenses swallow up almost their respective income, or perhaps even encroach on their capital. It is not, of course, here intended to argue against the advisability of taxes on consumption as a part, and, because of certain other advantages, even a desirable and necessary part, of a tax system. The above contention is directed against expenditure as the theoretical basis of all taxation. A tax on real estate alone is, according to this doctrine of incidence, a tax on expenditure. It reaches only the poorer classes of society, and exempts in ever increasing proportion the earnings or the property of

¹ This was seen in the seventeenth century by Sir William Petty, who said: "A land tax resolves itself into an irregular excise upon consumption, that those bear it most who least complain." See above, p. 15.

the wealthy. So far as the farmers themselves belong to the poorer classes they would bear a disproportionate share of the burdens. Thus the single tax on real estate, if it were diffused throughout the community, would be most unjust and oppressive. In reality, however, there is no such general shifting: the tax on the rural landowner often tends to stay where it is put.

The question of the incidence of the land tax presents comparatively few difficulties. Since the time of Ricardo it has been treated frequently and, on the whole, with success. But it is remarkable that the writer who has discussed the subject with the greatest clearness and subtlety from the abstract point of view—the Spanish economist, Florez-Estrada—should have remained practically unknown to this day.¹ Nevertheless, both Florez-Estrada's and Ricardo's doctrines require some qualification in order to fit them to the actual conditions of every-day life.

Theoretically, there may be five different kinds of land taxes:—

1. A tax on economic rent.
2. A uniform tax according to the quantity or the quality of the land.
3. A tax on gross produce.
4. A tax on agricultural profits.
5. A tax on property or the selling value of the land.²

1. *A Tax on Economic Rent*

If land is taxed according to its pure rent, virtually all writers since Ricardo agree that the tax will fall wholly on

¹ *Curso di Economia Politica*. Por Don Alvaro Florez-Estrada. London, 1828, 2 vols. The quotations are from the sixth edition, published in Madrid, 1848. An excellent French translation was made by L. Galibert, under the title *Cours Éclectique d'Économie Politique écrit en Espagnol*, and published in three volumes in Paris, 1833. Pantaleoni is the only writer who has referred to Florez-Estrada. But he makes little effort to qualify any of the conclusions.

² Florez-Estrada makes a slightly different division. *Ibid.*, part iv, "Del Consumo de la Riqueza," cap. v, 'De la Contribucion sobre la propiedad territorial,' ii, p. 328; in the French translation, iii, p. 223.

the landowner, and that it cannot be shifted to any other class, whether tenant-farmer or consumer. Since land on the margin of cultivation pays no rent in the economic sense, and since the no-rent land fixes the price of all produce, a tax on rent cannot affect the price of agricultural produce, and therefore cannot be shifted. The point is so universally accepted as to require no further discussion.¹

The further question as to how far the tax on rent may be regarded as a burden on the owner, has been discussed above in treating of the phenomenon of capitalization. It will be remembered that when the rate of the tax exceeds that of other taxes, the difference is not borne by the new purchaser, but is shifted back to the original owner. A permanent tax on rent is thus not shifted to the consumer, nor does it rest on the landowner who has bought since the tax was imposed.

A tax on pure rent, however, is very rare. The more difficult questions arise when the tax is assessed so as to include not only the rent of the landowner but the profits of the tenant farmer, or, as the case would be in America, where landowner and farmer are one, where the tax is assessed according to the value of the property. For the market price of land is equal to the capitalized value of its economic rent plus the profits of agricultural capital.

Ricardo maintained that if a land tax is assessed on all land indiscriminately, or if it is proportioned to the quality of the land, it will always be a tax on produce, and will consequently raise prices to the consumer. This doctrine has generally been adopted by his successors. In reality, however, the matter is not so simple.

Let us consider the cases in turn, taking up next —

¹ Ricardo, *Principles of Political Economy and Taxation*, chap. 10. We do not here enter upon the purely theoretical discussion as to the incidence of a tax not on rent in general, but on some particular kinds of rent. Abstractly, it would be possible to tax land suitable for raising a special kind of crop, and to exempt it as soon as it were used for some other kind of crop. Such a tax on rent would be akin to a tax on the profits of some particular occupation, as opposed to a tax on profits in general, and would tend to be shifted to the consumer. But such a tax on rent is hardly more than a theoretical possibility.

2. *A Uniform Tax according to the Quantity or the Quality of the Land*

In this case there are four possible results, namely: (1) not only the tax but a sum over and above the tax may be shifted to the consumer; (2) the exact amount of the tax may be shifted to the consumer; (3) the tax may be divided between the producer and the consumer; (4) the tax may fall entirely on the landowner.¹

The first case would be that of a fixed tax of so much per acre without distinction of value, as was true in some of the American commonwealths in the eighteenth century, especially Vermont and North and South Carolina. Suppose that there are three tracts of land producing wheat of the same quality, but, as a result of differences in fertility, yielding respectively ten, twenty and thirty bushels to the acre; and suppose further that this quality of wheat is worth 50 cents a bushel. Tract A would thus yield \$5.00 an acre, tract B \$10.00 and tract C \$15.00. If a tax of 50 cents an acre is imposed on all the land, the owner of tract A will have to obtain for his produce \$5.50 or cease cultivating. But if the price of ten bushels is \$5.50, the price of the twenty bushels produced on tract B will have to be \$11.00, and that of the thirty bushels on tract C \$16.50, since the price of the bushel will always be fixed by the expenses of cultivation on tract A—that is, 55 cents. The owner of tract B will thus pay in taxes 50 cents more than before, but, assuming that the demand is constant, will obtain from the public \$1.00 more than before, that is, he will make the consumer pay to him something more than the amount of the tax. Again, the owner of tract C will pay in taxes 50 cents more than before, but will obtain from the public \$1.50 more than before. A uniform tax on quantity, therefore, inevitably takes out of the pockets of the consumers more than it puts into the hands of the tax collector.²

¹ Cf. Florez-Estrada, *op. cit.*; French translation, iii, pp. 221 *et seq.*

² Ricardo called attention to this in chapter xii of his *Principles*.

The second case occurs when the tax is not laid uniformly according to the quantity of land, but is graded at various rates per acre according to the quality of the land—as, for instance, in Kentucky and Connecticut during colonial times. Thus, if in the above case the tax per acre on grade A were 50 cents, on grade B \$1.00 and on grade C \$1.50, then not only would the price of wheat remain as before at 55 cents per bushel, but the amount of taxes paid by the landowners would exactly equal the increased price obtained from the consumers. Hence, whenever a land tax is graded so as to follow with precision the differential advantages of production, and where the land is cultivated intensively up to the point when the law of diminishing returns becomes effective, given a constant demand, the tax will be shifted entirely to the consumers, without causing them any additional loss. In practice, of course, such gradation of the tax has always been very rough, so that it is very unlikely that the exact amount of the tax will be shifted to the consumers.

The third case—that of a division of the tax between the producer and the consumer—arises when the graded acreage tax is imposed in such a manner that the progression of the tax exceeds the augmentation in price. If, for example, grade A were assessed at 50 cents, grade B at \$1.25 and grade C at \$2 per acre, the consumers would still have to pay more than before the imposition of the tax, but the owners of grades B and C would make less profits than before. The degree in which the landowner and the consumer would share the tax would depend, other things being equal, on the rate of the graduation or progression of the tax.

Finally, the fourth case—that of the tax resting entirely on the landowner—would occur on the supposition (which manifestly is purely hypothetical) that the lands of inferior quality were free of tax. For since such lands fix the price of wheat, the owners of better lands could not raise the price; and since the tax is imposed on acreage, the tax would simply represent a diminution of their revenue.

So much for the fixed tax per acre of land according to

quantity or quality — a tax that is to-day virtually unknown in advanced communities.

3. *A Tax on Gross Produce*

The most familiar example of a land tax on gross produce is the tithe. The incidence of a land tax on gross produce has been most clearly discussed by John Stuart Mill,¹ who at first followed Ricardo in holding that a tithe, because it is imposed on land of all qualities, reduces corn rents in equal proportions; but that in the same proportion as corn rent is reduced in quantity, the corn composing it is raised in value. The producer at the margin of cultivation, then, pays one-tenth of his produce in kind, but since all prices are fixed by his produce, his nine-tenths will sell for as much as the whole ten-tenths previously sold for. At first, therefore, a tithe would be shifted to the consumers.

As Senior has shown, however, this would be only the immediate, not the ultimate, effect.² The final result would be not an increase of price, but a diminution of production and therefore a deduction from rent. It would ultimately be a burden, not to the consumers, but to the producers; for the higher price of food and of raw material would tend to check the progress of the community, and to lower to that extent the demand for land. This point has been demonstrated so clearly by both Senior and Mill that it is not necessary to repeat their arguments, so familiar to all English-reading students. Moreover, von Thünen has pointed out that the question whether a land tax is shifted to the consumers depends largely upon the character of the population as consumers. In poor countries a land tax would not be shifted even in first instance to the consumers, because they could not afford to pay more. Such a tax would, then, simply lead

¹ This is true, however, only of the later editions, where Mill accepted the corrections of Senior. Cf. his *Principles of Political Economy*, book v, chap. iv, §§ 3, 4.

² *Political Economy*. By Nassau W. Senior. 6th ed., 1872, pp. 122-125.

to a lowering of the standard of life of the consumers, and to a decrease in the prosperity of the producers.¹

Finally, the validity of the doctrine that the tithe, even in its immediate result, is shifted to the consumer depends on the assumption that the tax is a universal tax, applicable to all the land. This is not necessarily true. To-day, for example, in England, owing to the process of commutation of tithe, only part of the land is still tithable, so that, as in the case of all partial taxes, the burden is borne by the producer and not by the consumer. Even if all the land were tithable, the presence of international competition, as will be shown later, would render the tithe virtually a partial tax and thus not susceptible of being shifted to the consumer. Wherever the tax on gross produce still exists in civilized countries, it can no longer be regarded as one that is necessarily shifted to the consumer.

4, 5. *A Tax assessed according to Net Profits, or the Selling Value of the Property*

These two bases of the tax are, as has already been indicated, equivalent; for the selling price of agricultural land is nothing but the capitalized value of the net profits ordinarily derived from its use. Theoretically there may be two cases: either the land tax is a part of a wider system which taxes also all other net profits or all other capital or property; or the land tax is a single, exclusive tax, while other profits or other classes of property are exempt.

In the case of a general tax on profits, or that of a general property tax, it is difficult to see how the land tax can be shifted to the consumer. The theory of its complete shifting to the consumer assumes that the landholder at the margin of cultivation will otherwise abandon his farm, after the imposition of the tax, and transfer his capital and labor to some other occupation. But to this argument it may be

¹ *Der isolirte Staat*. Von Johann Heinrich von Thünen. Erster Theil (2d ed., 1875), pp. 326-339.

objected that, if all other profits or property are equally taxed, he will gain nothing by such a transfer. In fact, under a general tax there will be no inducement for him to abandon his farm. Since the supply will thus not be diminished, prices will consequently not rise. If, therefore, a tax on landed profits or landed property were simply a part of a general income tax or of a general property tax, there would be no shifting of the tax. It would tend to stay where it was placed in first instance.

It may be asserted, however, that our property tax is general only in name, since personal property, as has been indicated above, is virtually exempt from taxation outside of the rural districts. It may further be said that Ricardo and the other English authors discussed this form of the tax on the assumption that it was an exclusive tax. Nevertheless, it may be affirmed that, even on the assumption that the tax on agricultural profits or real estate is an exclusive tax, it does not necessarily follow that this will be shifted to the consumer.

Ricardo's theory would hold good only on two conditions: first, that there was absolute mobility of capital and labor; and second, that the community in question was so isolated that the farmers could fix the price of their own produce. In actual life, however, these conditions are far from being really existent.

The classical theory rests on the assumption that the owner of the worst land in cultivation will abandon the land rather than cultivate it at a loss; and that the decrease of supply will raise prices to the consumer. It is, however, incontrovertible that an increase of price often leads to a decrease of consumption, which again reacts upon the price, so that at best only a portion of the tax may be shifted to the consumer. This point has been fully explained in the chapter on general principles. Furthermore, it is in actual life frequently a difficult matter for producers to decrease the supply of agricultural products. To those acquainted with the conditions under which the cotton crop is grown in the Southern

States of the American Union, this is a familiar matter. Although annual conventions of the cotton growers repeatedly resolve that the low price of cotton is due to over-production, and that the supply should be curtailed, it seems practically impossible to reduce the cotton acreage. In order that any appreciable influence might be felt in the price, it would be necessary for whole tracts of the lands at the margin of cultivation to be abandoned, or to be used for some other purpose. Now this practically means wholesale ruin for immense classes, who have perhaps invested large sums in improving the land, which they consider fit for only that particular purpose. Rather than abandon the land they will often prefer to continue cultivation at less than the usual profits, for the no-rent land is that on which the cultivator gets just sufficient profits above the cost to enable him to live. In other words, the tax would often merely degrade the cultivators. Only when the tax is so exorbitantly high as to swallow up the whole rent, and all the agricultural profits, so as to leave the cultivator an inadequate margin for living expenses, will he abandon the land in such large quantities as to effect a material decrease of the supply. But such a tax is unusual in civilized communities. In other words, a tax on the landowner, if it be not extortionate, will simply reduce his profits. In proportion as the theory of the absolute mobility of capital from agriculture to commerce, or from one kind of agricultural investment to another, is attended with practical difficulties, the process of shifting the tax to the consumer will be impeded.

Secondly and more important, the Ricardian theory assumes a completely isolated community. In actual life, however, the market value of agricultural produce is fixed by the conditions of production in widely separated localities or countries. The imposition of a tax on the landowner of any one particular locality, therefore, cannot change the price of the product. The older theory seems to have overlooked the facts of international relations. If taxes precisely identical in character and amount were imposed by all countries on all

farmers, then indeed, given the complete mobility of capital just discussed, the tax might be shifted to the consumer. But this is never the case. The Western farmer, the price of whose wheat is fixed in Liverpool by the conditions of production in countries thousands of miles distant, will not get a whit more for his products if his taxes are doubled. He, and he alone, must bear the burden of the tax.¹

In fact, if the older theory were absolutely true, it would be virtually impossible to make the landowners or farmers suffer by any land tax, provided it were not levied expressly on pure economic rent. A country might then raise its entire revenue by imposing taxes on land alone, and would in no wise injure the agricultural interests. Yet all history has proved the error of this view. From the day of the exactions of the Oriental monarchs and of the later imperial Roman tax system to the mediæval methods of Spain and the arbitrary land tax of pre-revolutionary France, much of the misery of the agricultural classes must undoubtedly be attributed to the revenue system which burdened primarily the farmer. Implicit reliance on the Ricardian doctrine might justify every exaction on the farmer, but would inevitably react on agricultural prosperity.²

Our conclusion, hence, is that under actual conditions in America to-day the landowner may virtually be declared to pay in last instance the taxes that are imposed on his land. At all events, it is erroneous to assume any general shifting to the consumer. To the extent that our land tax is a part of a general property tax, it cannot possibly be shifted; to the extent that it is more or less an exclusive tax, it is even then apt to remain where it is first imposed—namely, on the landowner.

In England, where the farmer is almost universally the tenant and not the landowner, and where the rural tax or

¹ Cf. above, the discussion of general principles, p. 214.

² Cf. *De la Monnaie, du Crédit, et de l'Impôt*. Par Gustave du Puynode, ii, p. 153.

rate, as it is called, is levied according to rental value and imposed on the occupier, the question is primarily as to the incidence of the tax between the landowner and the tenant. It may be said that the tax will fall on the landowner in the case of pure competitive rents, and will be divided between the parties in the case of non-competitive rents. At any given time, when the tenant makes out his lease, he makes allowance for the rates which are collected from him. The rent which he is willing to give will vary with the tax which he is compelled to pay. To this extent, the burden falls wholly on the landowner. On the other hand, if, after the lease has been made out, a change is made in the rates, either by law or by the working of local causes, this increase necessarily falls on the tenant farmer who advances the tax. Still, this is not of much consequence in the long run, because the tenant will insist on an allowance for the increase when a new lease is taken. On the whole, therefore, it may be said that the tax on agricultural land falls on the landowner, whether the owner be the occupying farmer as in America, or whether owner and farmer are distinct personages as in England.

This is true, however, only on the assumption that the rent is a true competitive rent. Thus, it has frequently happened in England that farmers have been charged a lower rent than the purely competitive or rack rent. In such cases, an increase in the local rates would fall on the tenant and not on the landlord. As Mr. Goschen puts it, "any increase in local burdens must fall on the margin between the actual rent and the rack rent, and so far diminish the advantage derived by the farmer from his actual rent being below a rack rent; until that margin were exhausted, it would naturally be useless for him to apply to his landlord to readjust his rent."¹ In the same way a remission of rates will inure to the advantage of the tenant.

On the other hand the recent depression of English agri-

¹ See the analysis in Goschen: "Draft Report to the Select Committee on Local Taxation of 1870," in his *Reports and Speeches on Local Taxation*, 1871, esp. pp. 165, 166.

culture has caused a change in the opposite direction. The remarkable fall in prices during the past twenty years has not only destroyed the margin between actual rents and economic or rack rents, but has, in many cases, created a margin on the other side. Although the farmer has been struggling to adjust his rent to lower prices, the process has been a slow one; and the fall in actual rents has not kept pace with the fall of economic rent due to these lower prices.¹ Under such conditions, a remission of rates would be of all the greater advantage to the tenant. In the case of non-competitive rents, then, the incidence of the tax is partly on the owner and partly on the tenant.

¹ *Local Taxation and Finance*. By G. H. Blunden. London, 1895, p. 42.

CHAPTER III

TAXES ON URBAN REAL ESTATE

In the case of city real estate it is necessary to make a distinction between the two components of the real estate tax, the ground tax and the building or house tax—the tax on the site and the tax on the structure; for they are governed by distinct principles. Strictly speaking, we should have drawn the same distinction in the case of the agricultural landowner. But in that case the distinction is unimportant, because—in America at all events—the tenant is, in almost all cases, the owner, and because the value of the farmer's buildings is generally of minor importance when compared with the value of his land. So far as this is not true, however, the principles now to be discussed apply there also.

In American cities, where the occupiers of houses are frequently not the owners, the real estate tax is levied on the owners of property; and the question of ultimate incidence concerns only the landlord and the tenant. In England, where local rates are levied with very few exceptions on the occupiers,¹ not the owners, and are proportional not to

¹ The local rates in England are, theoretically, assessed on the occupier. Even for a long period before the Elizabethan poor law (43 Eliz., chap. ii), which is the basis of all English local taxation, it was the occupier, and not the owner, on whom fell the duty of relieving the poor. Cf. in general the history of local assessments in Castle, *On Rating*, chap. I, and a volume published by the Poor Law Commissioners in 1846 entitled *The Local Taxes of the United Kingdom*. However, under the Small Tenements Act of 1869 (32 and 33 Vict., chap. 41, §§ 3, 4) wherever the ratable value does not exceed £20 in London, £13 in Liverpool, £10 in Manchester or Birmingham or £8 elsewhere, the owner may compound for the rate and may be assessed instead of the occupier. Furthermore, by the act of 1850 (13 and 14 Vict., chap. 99), whenever the tenancy is for less than three months, the occupier may deduct the rate from the rent. Under

capital value but to rental value, the question is more complicated because of the peculiar divisions of ownership. Thus, not only is the occupier almost universally distinct from the owner of the building, but the owner of the building generally does not own the land. Furthermore, the building owner usually does not pay a ground rent to the original landowner, but pays only a leasehold ground rent, which changes from time to time, to the intermediary who has leased the land on a long rental and at a fixed ground rent from the original owner. In such a case the question of the incidence of rates concerns several parties, — the landowner, the leaseholder, the building owner and the occupier.¹ Such conditions, although rare, are not absolutely unknown even in American cities. Our study of the shiftings, if true at all, must be applicable equally to the simple American and the complex English conditions.

The urban real estate tax is either a pure land tax — for example, when laid on vacant lots — or a tax on both the land and the buildings. The latter is called in America the real estate tax, and on the continent the house tax; but both of

these two acts it has now become the practice for a part of the tenement house population, and even for the inmates of flats and apartments, to have the rates paid by the landlords. Nevertheless, in default of actual statistics, it may be said that in the English towns local taxes are paid in first instance generally by the occupiers.

¹ There are four chief methods according to which houses are built in the English cities: (1) the freehold purchase system, where the builder simply buys the lot outright; (2) the freehold rent-charge system (called in Scotland the feu-system and in Manchester the chief-rent system), where the landowner sells the land to the builder and has no reversionary interest, but reserves a perpetual fixed yearly payment called the rent-charge or chief; (3) the long-building-lease system, where the builder takes a lease for 999 years, at a fixed annual rent; (4) the short-building-lease system (or London leasehold system), where the landowner leases the land to the builder, or what is known as an "improved leasehold ground rent." See *Urban Rating, being an Inquiry into the Incidence of Local Taxation in Towns*. By Charles H. Sargant. London, 1890, chap. I. See also *Evidence and Report of the Select Committee on Town Holdings, 1886-1890*; and Munro, *The Local Taxation of Chief Rents*, 1891. Cf. *Local Taxation and Finance*. By G. H. Blunden. London, 1895. See also *The History of Local Rates in England*. By Edwin Cannan. London, 1896.

these designations are, from the point of view of economics, incorrect. The continental term is wrong because the house tax really includes a tax on the site as well as a tax on the structure. The American term is inexact, because it confuses such entirely distinct taxes as the ground tax and the building tax, which are governed by different laws of incidence.

The value of a house, in the ordinary usage of the word, depends upon the value of the structure plus the value of the lot. The value of the structure itself is fixed by the law that governs the value of commodities the supply of which can be increased at pleasure, that is, in the long run it is equal to the cost of production, or rather of reproduction. The rent of the house proper is normally equal to the interest on the capital expended plus an annual sum which, when capitalized, will be sufficient, after paying all necessary expenses, to replace the capital by the time the house is worn out. The laws which govern the incidence of taxes on houses or on house rents are, therefore, analogous to those which govern the incidence of taxes on capital or on competitive profits. On the other hand, the value of the lot is fixed in agreement with the general principles of economic rent, according to which the price paid is measured by the superiority of situation.¹ It would be still more exact to

¹ Pantaleoni, *Traslazione dei Tributi*, pp. 208-213, makes a long argument against confusing economic rent with the rent of a city lot. With him economic rent means agricultural rent, and is due only to the law of diminishing returns; while rent arising from situation is not economic rent, but is what he calls surplus rent (*sopra reddito*). But this surplus rent is simply another name for profits. Rent proper, he maintains, arises from the fact that the price of agricultural products is the same while the cost of production differs. Surplus rent, or profits on city lots, arises from the fact that prices differ, while the cost of production remains the same. The English, he thinks, have improved upon the Germans and French in distinguishing between land rent and ground rent; but have not seen that ground rent is really not economic rent at all.

In answer to Pantaleoni, it may be said that there is a certain justice in his distinction, but precisely in the opposite way from that in which he understands it. It seems arbitrary to confine economic rent to that differential product of the law of diminishing returns. Ricardo himself saw this and von Thünen has developed

make the assertion that the value of a city lot is determined by the general law of price which governs all those commodities which are not susceptible of an indefinite increase in their supply.

We may consider four cases, corresponding to actual facts:—

1. The tax may be levied on the ground owner alone, without any reference to a house tax on the house owner. This would correspond to Henry George's single tax. It would be in effect a tax on ground rents.

2. The tax may be levied on the house owner, who may or may not be the ground owner. This is the case, for instance, with the "Hauszinssteuer" in Austria.

3. The tax may be levied on the ground owner, who is at the same time the house owner. This is the condition of the real estate tax in the United States.

4. The tax may be levied on the occupier. This is true of the local rates and the inhabited house duty in England.

It is with this fourth case alone that the English economists have busied themselves. On the other hand, most of the French and German works discuss only the second case. Let us take them up in order.

1. *A Tax on the Ground Owner*

The case of a tax levied only on the ground owner is comparatively simple. The owner who leases his land will always endeavor to get as much as possible for it. The price he gets will, in general, be entirely unaffected by the imposition of a tax. For, since the supply cannot be increased, and since there is no question of cost of production,

the idea. On the other hand, whatever truth there is in what Sidgwick calls the static theory of rent applies equally to the causes which fix the rent of a building lot. In other words, instead of applying the principle of economic rent to city lots, it would be more exact to say that the same causes which fix the differences in value of city lots also fix those of agricultural lands, that is differences in relative situation or in relative fertility combined with differences in situation—or, in short, differential advantages in yielding net profits.

the change in price will be effected only through a change in the demand. The price, in other words, will be fixed by the degree of marginal utility. Now, if the demand for the site increases to such an extent that the ground rent not only covers the new tax but leaves a profit in addition, the tax cannot be shifted to the lessee. For the price would have been the same without the tax, since the demand of the lessees is not affected by a tax on the lessor. The ground owner will simply get less net return than he would have obtained had no tax been imposed—that is, the tax will fall on him. In the same way, if the demand for the site decreases, the price will diminish and the ground owner can certainly not shift the tax. Moreover, if he sells the land in the meantime, he will lose again in the diminished selling value of the lot. Finally, if the demand remains the same, there will be no alteration of the price, and the ground owner will obtain less net income than before because of the tax. Therefore it may be laid down as a general rule that a tax laid on the owner of the soil, or on ground rents, cannot be shifted.¹

When the tax on the ground rents, however, is assessed not on the ground owner but on the occupier, the results, as we shall see later, are somewhat different.

¹ J. S. Mill, *Political Economy*, book v, chap. iii, § 6, argues that this is true only if we assume an equivalent tax on agricultural rent. He says: "If a tax were laid on ground rents without being also laid on agricultural rents, it would, unless of trifling amount, reduce the return from the lowest ground rents below the ordinary return from land, and would check further building . . . until increased demand or diminution of supply . . . had raised the rent by a full equivalent for the tax. But whatever raises the lowest ground rents raises all others, since each exceeds the lowest by the market value of its peculiar advantages."

This argument seems to err through the assumption of a slow and continuous gradation from agricultural rents to ground rents. As a matter of fact, there is almost always a sudden jump from the one to the other. One has only to look at the outskirts of the ordinary American town to be convinced of the fact that land even only prospectively fit for building sites will be kept idle sooner than be used for agricultural purposes. The whole question, moreover, has simply a theoretical interest, since agricultural lands are almost always taxed as well as city lots. Sidgwick, *The Principles of Political Economy*, book iii, chap. viii, § 8, iv, follows Mill.

2. A Tax on the House Owner

Let us next take up the case where the tax is imposed on the house owner, irrespective of the question whether he is the landowner. In other words, let us deal with the tax on the structure, or, if the tax is not levied according to capital value, with the tax on building rent as opposed to that on ground rent.

The generally accepted doctrine — that of Adam Smith, Ricardo and Mill — may be expressed as follows: Buildings represent the investment of so much capital and labor. They require an outlay for construction, for maintenance, for repairs, for insurance. No one will enter on the business of having houses built for investment unless he can count on a definite return, which must in general be equal to the returns from capital invested in undertakings of approximately the same nature. A tax imposed on the owners of the building will therefore generally be shifted to the occupiers; for, if the tax could not be shifted, it would reduce the profits of the owners below the customary level in similar investments. The result would be a cessation of building operations, a consequent scarcity of houses and a gradual increase in the rent or value of existing houses, until the margin became high enough to tempt the investor into further operations. The working of this law of the transferability of capital is, of course, slower here than in the case of quickly consumable commodities; for since houses are more or less permanent, we cannot assume an immediate diminution of supply. Given a stationary supply of houses, their value or their rent will rise only with the slow increase of population, that is, with a relative diminution of the supply. But in the long run the working of the law is inevitable. Such a tax will, therefore, be shifted to the consumer, that is, to the tenant.

This doctrine, which may be called the orthodox opinion, requires qualification in some particulars. The two chief

reasons why the theory of the inevitable shifting of the house tax to the tenant is not always true are as follows: (1) a distinction should be drawn between new and old houses; and (2) another should be drawn between general and exclusive taxes.

In the first place, a distinction should be drawn between houses already constructed before the tax is imposed or increased and those built after the imposition or increase of the tax. It may be argued that, since a tax on new houses is always shifted to the occupier—for otherwise they would not be built—the same reason applies to old houses; for a scarcity of houses will affect the values and rents of all houses, whether new or old.

This argument, however, is not convincing. Suppose that a town, or a portion of a town, is for some reason decaying. In such a case, the values and the rents of existing houses will of course fall. The owners of existing houses cannot, at first, escape bearing the burden of the tax. They cannot shift the tax to the ground owners, for since the structures are already on the land, presumably under long leases, the ground owners cannot be compelled by competition to reduce their ground rents. Until the expiration of the lease the house owner certainly cannot shift the tax to the ground owner. On the other hand, the house owner will not be able to shift the tax on the occupier, because no actual diminution in the supply of houses is possible, and because, by the supposition, there is no increase in the demand, but rather the reverse. Not until a condition of stable equilibrium has been reached will the building owner cease to bear the burden. That is to say, it will not be a question of equality of profits, but simply one of the existing relations of demand and supply. Hence, if population is stationary or declining, a tax on existing houses (and there will, of course, be no new houses, because there will be no demand for them) will inevitably fall on the house owner. Furthermore, if he sells the house he will lose the capitalized value of the decrease of rent; so that, under the theory of capitalization, only the original

owner will bear the tax until there is a still further decline in population, when the process will repeat itself.

Although the condition just described may be considered in some sense exceptional, it actually occurs in all communities at periodically recurring intervals. And although the reasoning would not be applicable to the general conditions of progressive society where new houses are being continually built, the distinction is of sufficient importance to invalidate the hard and fast rule of the older economists.

Another objection, which is, however, less tenable, has recently been raised against the older doctrine. Pantaleoni in Italy and Sidney Webb in England maintain that a tax on the building owner tends to be shifted, not on the tenant, but on the ground owner. Pantaleoni claims that this must necessarily happen because, if the tax were to fall on the house owners, they would build no more houses, and would thus effect a decrease in the demand for building lots, which would result in a depreciation of the value of the land.¹

This argument seems to rest on a misconception. It is, indeed, true that the building owners will not bear the tax. But what reason is there for assuming that the mere cessation of building operations, which would ensue on the imposition of the tax, will cause a depreciation in the value of the lot? The non-construction of new houses cannot, of itself, cause the ground rents of existing houses to fall; it can only prevent a further increase in the value of the land, or perhaps, at most, bring about a fall in the value of vacant lots. Until the old leases run out, the ground rents of occupied lots are not apt to fall, even if population, and therefore demand, diminishes. Much less will they fall if simply a tax is imposed. Even after the old leases run out, the ground rents will not fall unless the taxes on the houses are so extraordinarily high that the building owners, who have the privilege of renewal, will prefer to abandon their houses entirely rather than to renew their leases. Only in this most

¹ Pantaleoni, *op. cit.*, pp. 221-223.

exceptional case¹ can the building tax be shifted in part on the ground owner. If, indeed, the law of real estate were changed so that fixtures to the land would not go with the land, and if houses could easily be removed from plot to plot, then, but only then, would it be true that a building tax could always be transferred to the ground owner in the shape of decreased ground rent.

Mr. Webb's argument is equally inconclusive. He maintains that the ground landlord does not occupy a fixed position. Land in the neighborhood of a city has only an agricultural value until it becomes ready for splitting up into building plots. But the value of such land, says Mr. Webb, does not pass imperceptibly from agricultural value to the building value. By custom there is always a great jump. The landowner, who can in any case get a price much larger than the agricultural value, Mr. Webb continues, has a fixed point of resistance. He will be willing to take a little less than before the imposition of the tax, since it is merely a question of competition between the builder and the owner of land available for building. Hence the incidence of a tax on houses will be the same as that of a tax on land—namely, on the landowner.²

This argument seems to be fallacious because it ignores the fact that the ground owner is in the stronger position. As between the landowner and the tenant, the tenant is the weaker party.³ The house builder knows in normal cases of increasing demand that he can more easily raise rents (since demand increases) than compel the ground owner to take

¹ This exceptional case is virtually the one mentioned by Professor Edgeworth in his example γ in the *Economic Journal*, vii, p. 645. He expresses it a little differently, making the exception consist in the fact that the tax is equal to the original ground rent plus the constant building rent.

² Webb, in *Report from the Select Committee on Town Holdings*, etc., 1890, qu. 42-44, pp. 5, 6.

³ Bastable, *Public Finance*, book iv, chap. ii, § 5, as well as Edgeworth, *Economic Journal*, vii, pp. 66-68, seems to overlook this in expressing the opinion that the tendency is for the tax to be shifted to the ground owner. Graziani, *Istituzioni*, p. 362, agrees with the argument in the text as over against Pantaleoni and Webb.

less than the market value. The landowner is not compelled to part with his land; but the tenant is compelled to occupy some apartments.¹

It would, therefore, in the main be true that, given the normal conditions of progressive society and the continued existence of prosperity—and apart from the qualification to be noticed below—the tax on the building owner is shifted. And since, as we have just seen, the tax cannot be shifted to the ground owner (except in the rare case mentioned),² it will tend to be shifted to the other party interested—the occupier. In other words, given an increased demand for house accommodations, the rents of existing houses will rise until the supply of new structures is equal to the demand.

It may be said that in the meantime the house owners have a practical monopoly. Theoretically, indeed, the house owner himself would during the interval bear the tax if the rise of rents were due solely to increase of population, because in the face of this increased demand he could have obtained the same rent, had the tax not been imposed. In other words, as in the case of all monopolies where the price is fixed only by the purchasing power of the consumer, the tax would simply mean a diminution of the otherwise greatly enhanced profits to the house owner.³ Practically, however, there is never such an interval in progressive communities. Houses are built continually, and if there is temporarily any deficiency in the supply, it is owing to the decreased profits

¹ For a fuller proof of the validity of this statement, see below, p. 253.

² Professor Bastable advances another case: "It may happen that the premises, owing to the situation, command a monopoly value, in which case the owner, having obtained the highest possible rent, must submit to pay the public charges; the mere building owner will recoup himself at the ground landlord's expense."—*Public Finance*, book iv, chap. ii, § 5. But why should the landowner take less? The building owner is in the weaker position, for his building is on the land, and under the law goes with the land. Moreover, as is pointed out below, p. 251, there is no such thing as a strict monopoly value of a lot.

³ This is the case mentioned by Ricardo, *Principles*, chap. xiv, par. 2; by John Stuart Mill, *Political Economy*, book v, chap. iii, § 6, par. 3; and by Professor Edgeworth, *Economic Journal*, vii, pp. 50–52.

of the house owners. In order that these profits may be maintained, the tax on new houses must fall where alone there is a margin for it—that is, on the rent paid by the occupier. But since the rents in the new houses fix the standard of rents in the old houses (allowance being made for the superiority of situation, which, however, has nothing to do with the building rent, but only with the ground rent), the owners of both old and new houses are able, in the normal cases here cited and in the long run, to shift the burden to the tenants. But it must be remembered that this is true only in the normal cases and in the long run.

The second qualification of the doctrine that the building tax will be shifted to the occupier rests on the distinction between a general and an exclusive tax. The whole argument up to this point has been conducted on the assumption that the house tax is a special or exclusive tax. As soon as other forms of capital or other profits of investments also are taxed, the entire basis of this argument falls away. This has been frequently overlooked by those who have attempted to draw practical conclusions from the theories of the classical economists. The doctrine of the shifting of a house tax to the occupier depends on the assumption that would-be house builders will otherwise prefer to put their money in non-taxable investments, thus bringing about a scarcity of houses and an increase of rents. But if other capital or profits are also taxed, there will be no reason for refusing to invest in houses. Hence rents and values will not rise, and the tax cannot be shifted. In other words, when a house tax is part of a system of taxation which reaches all other kinds of property or income, and taxes them at the same rate, the incidence of the tax will always be on the original taxpayer—that is, the house owner. His profits, like those of all other capitalists, will be reduced by the tax. So, again, if house property or house rents are taxed at a higher rate than the property or profits of other classes, only the surplus above the average rate of the tax will be shifted

to the occupier, and that only in the normal cases already mentioned.¹

Our conclusions may be summarized as follows: If a tax is imposed on the building owner, it will remain on him when population decreases or is stationary, or when the locality decays. It will be shifted to the ground owner only when the diminution or decay is so great and the taxes so high that the building owner will voluntarily relinquish the house rather than renew the lease. It will be shifted to the consumer—that is, the occupier—under normal conditions of advance in economic welfare so far as the tax is an exclusive tax. Otherwise only so much will be transferred to the occupier as exceeds the usual tax rate for other property or profits, while the remainder will fall upon the house owner. The exact proportions depend upon the general system of taxation in each particular country or epoch, and upon the particular conditions of the individual case.

3. *A Tax on the Owner of House and Ground*

We next come to the third case, where the tax is levied on the ground owner who is at the same time the house owner. This is the common American system of the real estate tax. The question of incidence is here only between the owner and the tenant. The problem is, therefore, comparatively simple, as we need only to combine the conclusions arrived at in the two preceding cases.

So far as the real property tax may be resolved into the site tax and the building tax, the tax on the land when assessed on the landowner will tend to remain, as we have seen, where it is first put. The incidence of the ground tax, in other words, is on the landlord. He has no means of shifting it; for, if the tax were to be suddenly abolished, he would never-

¹ The theory of capitalization of incidence is not applicable here, although, remarkable to say, it has been attempted by Myrbach, "Die Besteuerung der Gebäude und Wohnungen in Oesterreich," *Tübinger Zeitschrift für die gesamte Staatswissenschaft*, vol. 41, esp. p. 409.

theless be able to extort the same rent, since the ground rent is fixed solely by the demand of the occupiers. The tax simply diminishes his profits.

The incidence of the house tax, on the other hand, is fixed by the rules laid down above. The question, therefore, as to how far the real estate tax is shifted to the occupier in American cities depends partly on the actual existence or non-existence of a general property tax, partly on the relative value of the house and the lot, and partly on the peculiar circumstances of the particular piece of property.

If our general property tax were actually enforced, the real estate tax would beyond all doubt be borne entirely by the owner. But in American cities the general property tax has become virtually a real property tax. In other words, city real estate bears the greater part of the weight of municipal taxation. In proportion as city houses are taxed at a higher rate than other capital, the main condition under which the tax *may* be shifted to the occupier is present. If we take the small American towns, where the investments are mainly local and where personal property is reached to a fairly high degree, then it is very probable that the real estate tax is not shifted to the occupier. But the larger the city, and the greater the chances of investment outside, the less will be the proportion of personalty taxed, and the greater will be the possibility of the shifting of a part of the real estate tax.

The possibility that the tax may be shifted turns into a probability when we remember that the building tax tends to form the greater part of the total tax. The average dwelling-house in New York city, for example, is worth, when first built, from two to three times as much as the lot. In the tenement house districts the proportion is slightly, if at all, less, except in the case of the tumble-down wooden houses, which are fast disappearing. It is true, of course, that with the passage of time the value of the house tends to decline, while that of the lot tends to increase, from which it might be inferred that the real estate tax falls mainly on the owners. But this tendency is materially counteracted by the fact that,

as sites become more valuable, owners are apt to tear down the old structures and to erect more expensive, and therefore more lucrative, buildings. Even in the crowded business centres it is now becoming the custom to erect vast buildings whose value considerably exceeds that of the ground on which they stand.

Finally, remembering the qualifications laid down above, it may be said that, while the real estate tax falls on the owner in case of a stationary or a declining population, a considerable portion of the tax is shifted to the tenant, in normally prosperous town or city districts, under the present administration of our property tax. When we reflect that in the city of New York over three-quarters of the population live in tenement houses, we are thus forced to the conclusion that in the great cities a great share of American local taxation is to-day borne by those least able to pay. The greater the extent, however, to which the existing real property tax is being generalized or supplemented by other taxes designed to reach the real ability of the taxpayer, the less probable will be the original shifting of the tax to the occupier. The reforms in the general conditions of American local and state taxation will thus indirectly affect many classes who at present think that they have nothing either to gain or to lose by the process. The question as to how far these may again be able to shift the tax on others is a part of the larger question of the taxation of property, profits and wages, and will be discussed later.

4. *A Tax on the Occupier*

We take up finally the question of the incidence of a tax assessed upon the occupier according to the rent he pays. This is the system of the English local "rate." Here again we must distinguish between the ground rent and the building rent.

Let us discuss first that portion of the tax which is theoretically levied on the land. In accordance with the general

principles laid down in our discussion of the tax on the ground owner, it might seem that the tax on rent, although advanced by the occupier, must in the long run be borne by the ground owner. The tax will be shifted by the occupier to the house owner, it is said, because, when the tenant takes out his lease, he will make a deduction, measured by the height of the tax, from his rent. He will offer only so much rent as is warranted by the superiority of the site; and this superiority is not increased by the imposition of a tax. To this extent, then, the tax will fall on the house owner. But the building owner will shift the tax to the owner of the land. As has been said: "The builder calculates on a certain profit, or else he would not build; he knows that tenants of a certain class can afford to give a certain rent and no more for a certain kind of house; and therefore if building is to take place at all, it is clear that the rates must fall there where alone a margin exists to bear them; that is to say, on the price given, or ground rent promised to the owner of the soil."¹

The contention, however, that this part of the tax falls wholly or necessarily on the ground owner, although it has been usually adopted, is partially incorrect; and for four reasons. These are (1) the relation between rent and rates; (2) the distinction between long and short leases; (3) the relation between the ground landlord and the building owner; and (4) the degree of elasticity in the demand for the particular plot of land.

In the first place, the ground rent might be so low and the rates so high that the builders could not afford to erect any more houses. They could not hire the land for any less, because the ground rents would be so low that the owner would prefer to use the land for other purposes rather than submit to a reduction. The result would be a diminution in

¹ Goschen, "Draft Report," etc., *op. cit.*, 166. The same idea is shared by most of the English writers. The evidence given before the Select Committee on Local Taxation in 1870 contains every possible view. Cf. esp. questions 1276, 2731, 2739, 3211, 3404 and 4050.

the supply of houses and a consequent rise of rent to the tenant or consumer. But this first condition will arise very rarely, and may be passed over as unimportant.¹

Secondly, the whole argument that this part of the tax falls on the landowner rests on the assumption that at the beginning of every lease the lessee will demand that allowance be made for the tax. This assumption is, however, not of much use in the case of long leases. After a long lease has been taken out, an unexpected change may occur in the rates; in fact, the growing tendency of modern local taxation is toward an increase. The landowner who has fixed the ground rent for a number of years will still get this rent, irrespective of any growth of rates. The increased burden cannot then be shifted on him; it must be borne by the occupier who advances the tax. Not until the expiration of the lease will the tenant be able to make a new arrangement by which he will try to shift the burden on the owner. Thus, only in the case of short tenancies could it happen that the tax would fall on the owner. In all those cases—especially numerous in England—where the occupier rents for a term of years, the excess of any rates beyond the amount calculated in the original lease necessarily falls on the occupier. The important point to be noticed is the time of the *original* imposition of the tax—a point too often neglected. If the owner was assessed for the taxes in first instance, as in America, there would be no question that this excess of taxes, like the remainder of the ground rent tax, might fall on him. But if the occupier advances the tax, he cannot improve his condition until the expiration of the lease. In England, then, the ground rent tax does not fall wholly on the owner, but at any given time may be borne in part by the occupier.

Before taking up the third and fourth limitations on the theory that the ground rent tax is shifted to the ground owner, let us consider the problem in its most usual form—the determination of the incidence of a ground rent tax

¹ Mr. Goschen himself makes allowance for this.

assessed on the occupier in the ordinary case of short leases. In the preceding paragraph it has been taken for granted that at the beginning of each short lease the tenant will insist on a reduction of the rent as a compensation for the local rates assessed upon him. Only on this assumption will the owner ultimately bear the taxes. But is this assumption always correct. The real question is: Who bears the taxes in the case of short leases or tenancies by the year, the quarter, or—as is the case with the majority of the tenement house population—the month or the week?

The solution of this problem involves an application of the considerations affecting the general law of value, as laid down in the preceding chapter. From the point of view of pure theory there are three possible cases. (*A*) where the supply of building lots is far in excess of the demand, as in the suburbs or in sections of dwindling prosperity, where there are many unrented houses; (*B*) where the supply of buildings on new lots just about keeps pace with the demand; and (*C*) where the supply of building lots is exhausted, and the number of houses may be considered as constant.¹

Case *A* is not attended with much difficulty. If the lot is situated in any outlying section, or in a decaying portion of a town where the demand is slack, the tax, even if advanced by the tenant, will be shifted to the landlord. The occupier can afford to choose, and will not voluntarily assume the burden of any one else. Being in the stronger position, he will not consent to pay the higher rent due to the imposition of

¹ A somewhat similar classification is given by Pierson, *Leerboek der Staatshuishoudkunde* (2d ed., 1896), pp. 156, 157 and 174–185. Mr. Pierson distinguishes four cases: first, where there is an abundance of building lots, as in the country, and where the ground rent accordingly amounts to little or nothing; second, where the locality is decaying, and rents fall below the ordinary return on the capital invested in the house, and where the ground rent is also zero; third, where there is a rentless margin on the outskirts of the city with an interior area within which ground rents form a considerable portion—larger as we approach the centre—of the total house rent; fourth, where all the building lots are occupied, and where the supply of houses may be considered constant.

This classification, it will be seen, has many points in common with the distinctions in the text. Mr. Pierson thinks that when a tax is imposed on houses,

the tax. But this will hold good only so long as the decay is continuous. As soon as the decay is arrested, we have the conditions of case *B*, to be discussed in a moment.

Case *C* likewise presents little difficulty. Let us assume the existence of a walled town where every plot is occupied, or a section of the city which, through some combination of circumstances, is the only one fitted for a certain kind of business, and where all the land is covered with buildings. In such a case, the landowner has a virtual monopoly, and will exact the highest rent that the tenant can pay. If a ground rent tax is, then, imposed on the tenant, it will be shifted to the landowner, on the general theory of taxation of monopoly profits; for, according to the hypothesis, the landowner has already exacted the uttermost farthing from the tenant. Could the tenant pay an increased rent—that is, the old rent plus the new tax on ground rent—the landlord would have exacted this before the imposition of the tax. In the same way, a remission of an existing tax on the occupier would enure to the landowner, through an increase of the rent charged to the occupier. Thus, in the case of a monopoly site, as well as in the reverse case of a site which goes begging for a tenant, a tax on ground rent assessed on the occupier will be shifted to the landowner.

This case *C*, however, is only of theoretic interest. Practically, it never exists. The mediæval walled towns which were increasing in population always reserved some vacant building space within the walls. As soon as this was exhausted, the walls were enlarged or the surplus population was swept

the result will be that in the first case the ordinary law applicable to manufactured commodities will obtain; and that in the second and fourth cases, no influence on house rents will be perceptible. The third case, which he considers the most difficult, he solves in the following way: at the margin—supposing that the demand for new houses increases with the growth of population—rents will rise by the amount of the increase in the cost of production, so as to affect the ordinary profits of the builder. This increased rent at the outskirts will increase competition for houses of the interior, and will send rents up to a point such that the excess of rent paid by the occupier in the more favorably located areas over that paid at the outskirts will be about the same as before, or perhaps a little less than before.

beyond the walls. In modern times, again, there is no such thing as a strict monopoly of building sites. The ground rent of even the dearest plot in a crowded city exceeds the ground rents of other plots only by the value of its relative superiority. Monopoly implies absolute control of supply. Where building lots shade into each other by imperceptible gradations, with an abundant supply of the lower-grade lots, we cannot speak of an absolute control of the total supply, but only of a control of a part of the supply. This is not monopoly, but only the ownership of a better grade, possession of which gives a higher price, but not a monopoly price.

Let us, then, take up case *B*, which is the ordinary case in normal communities. It is the case of a district growing in population and prosperity, where there is an ever-increasing demand for building lots, but where the increase of ground rent is limited by the possibility of utilizing unbuilt land in less favored sections. Rents in the crowded slums, or in a favored business section, will continually rise; but at any given moment the rise is limited to the differential advantages which a particular neighborhood possesses over other possible sites. With the increase of population, there is a continual increase of house accommodation in the wider periphery. The possibility of getting an equally good apartment a little further off will keep the rent of the better situated apartment down to the level of the other, plus an addition due to the advantages of the better situation. Rents in the slums are, indeed, higher than rents in the suburbs; but the former exceed the latter chiefly because of the saving in car-fare, and because of the assumed social benefits of life in a crowded city. Any effort to put rents above this margin of advantage would inevitably fail.

Here we meet the considerations which we have mentioned as the third and fourth reasons¹ for dissenting from the ordinarily accepted view as to the incidence of a tax on ground rent. The third reason was the relation between the house owner and the landlord. When a man rents a house

¹ Above, p. 247.

and agrees to pay taxes in addition to the rent, he does not make a formal distinction between the tax on building rent and the tax on ground rent. He is simply conscious of the fact that a house in a better neighborhood costs more than an equally good house in a poorer neighborhood, and that the local rates which he is called upon to pay are by so much the larger. If an additional tax is imposed on what is theoretically the ground rent portion of his periodical payment, it may indeed happen that the tenant will content himself with meaner apartments in the same neighborhood, or will seek equally good rooms in a less desirable locality. In such a case, the decreased demand for the original house might induce the house owner to be satisfied with a lower total rent, and he in turn would endeavor to shift the loss, so far as it is due to a tax on ground rent, to the owner of the land. But is it true, as Adam Smith says, that "the more the inhabitant was obliged to pay for the tax, the less he would incline to pay for the ground"?¹ Is it not rather the case that, as we have pointed out above,² a tax on the owner of the building can be shifted to the owner of the land only in the exceptional case of the tax being so high as to make the house owner willing to abandon the house. Hence, even on the assumption that the tax will bring about a change in the demand for particular houses, the burden will not fall (except in most unusual cases) on the landowner, but rather on the building owner. Above all, the process here described does not imply a shifting of the tax from the occupier to the building owner (or, in exceptional cases, to the landowner). Even though the occupier can evade the tax, he cannot shift it. Evasion, as we know, is quite another thing from shifting. The tax that the occupier pays on his smaller rent will still fall on him. The landlord (or rather the "house-lord") may enjoy, for the time being, less revenue than before, but the new tax levied on the tenant will nevertheless fall on the tenant. A small tax on smaller rent is just as bad as a high tax on high rent. Even under the most favorable hypothesis,

¹ *Wealth of Nations*, book v, chap. 2.

² Above, p. 240.

then, we cannot speak of a total shifting of the tax from occupier to landlord.

This brings us finally to the fourth and most important consideration—the question, namely, of elasticity of demand. Since the ground rent, as we have seen, must be paid as a part of the total rent of the house, the problem is really one of the demand for house accommodation. Most writers who have spoken of houses have put them in the category of ordinary commodities of complete elasticity, where a change in price immediately brings about a proportionate change in demand. But this hypothesis, upon which the validity of the reasoning in the preceding paragraph depends, is of questionable accuracy.¹ In a preceding chapter it was pointed out that in the case of absolute necessities, as well as in that of expensive luxuries, great alteration of price goes hand in hand with slight variation of demand.² House accommodation, now, is in part an absolute necessary, in part an expensive luxury. For many classes of the population, especially in the congested areas, it is essential for the tenants to be near their work. For one reason or another, they prefer to remain where they are. As in the case of all necessities, the effect of a tax will be to cause them to forego other things rather than change their residence. Practically, it means that they will raise money to pay the increased rent by such expedients as taking in lodgers—that is, by foregoing some of the comforts that they have hitherto enjoyed. In other quarters of the city, on the other hand, comfortable houses may be put in the category of luxuries. It is a familiar fact that many people prefer to maintain their supposed station in life at almost any cost. In such cases a tax on house accommodation tends, as in the case of all taxes on luxuries, to make them forego other things which they deem less desirable.

¹ Professor Edgeworth (*Economic Journal*, vii, p. 52) still clings to this hypothesis. He concedes the opposite in the case of the working classes; but he fails to notice that this is equally true of houses considered as luxuries rather than as necessities.

² Above, p. 189.

A tax, then, which will bring about such a displacement as materially to affect the demand for house accommodation must be an extraordinarily high one. Under usual conditions the elasticity of demand would be apt to frustrate the action of the assumed law of complete shifting. The argument is similar to the one that has been used in discussing the effect of economic friction. Just as we objected above to the older theory of the shifting of the land tax to the consumer, because of the untenable assumptions of perfect mobility of capital and territorial isolation, so the same objection may be made to the theory of the necessary shifting of the local rates from occupier to landlord, and largely because of similar untenable assumptions. As has been well said, economic rent is "the rent which an intelligent tenant who had an alternative investment for his capital and mobility, and acquainted with the market and his own industry, would offer to pay."¹ But the rent actually paid often differs from pure economic rent. John Stuart Mill has pointed out that in Ireland agricultural rents are often persistently above the economic rent, mainly because of the lack of opportunity and the lack of mobility on the part of the tenant. In the same way the tenants in the slums of large cities have practically little mobility. They must live in the neighborhood of their work, they shrink from the expense in moving from apartment to apartment, and their choice is limited in a hundred ways. Here, as in so many other cases, the tendency of the tax is to stay where it is first imposed.²

¹ Sidney Webb in *Select Committee on Town Holdings*, 1890, Evidence, qu. 51.

² As Sir T. H. Farrar says: "Whatever be the theory on these matters, a tax is very apt to stick where it first falls." *Select Committee*, etc., Evidence, qu. 1246. Cf. Thorold Rogers: "It is by no means the case that a person who has a tax imposed upon him can always impose the whole of that tax upon his neighbor." — *Ibid.*, qu. 2721.

Some of the qualifications of the old doctrine are well put by Cliffe-Leslie in the following passage: "The doctrine by which eminent economists of our own day affect to determine the incidence of rates assumes . . . that capitalists not only know the past and present profits of all occupations and investments, but foreknow them at remote periods — to the end of a long building lease, for example. Yet it is clearly impossible for persons contemplating the building or buying

We see, then, that the incidence of a tax on ground rent is not the same when the tax is advanced by the tenant as when it is assessed on the ground owner.¹ In the latter case, as in the United States, it is always borne by the ground owner; in the former case, as in England, it is generally

of new houses to foretell, even for twenty years, the profits that a single investment will yield. The movements of business and population, the demand for houses and other buildings, the increase of wealth and money, and the general range of incomes and prices, the supply of new houses on the spot, the means of locomotion bringing other districts within reach, all defy calculation. . . . The truth is that the profits of house property, the rents that can be exacted from occupiers, and the incidence of rates, depend on no such fiction as the 'average rate of profit,' but on the demand for and the supply of houses, and these conditions vary from time to time, and from place to place. . . . The constant increase of population, the narrow limits of distance from their business within which it is convenient to most people to live, and the cost and trouble to existing occupiers of removal, give the owner, in most cases, the stronger position, and enable him to throw any increase in the rates on the occupier. . . . The occupier of the house pays all the rent that can be screwed out of him. A little more could be screwed out of him were there no rates, and to that extent the rates may be said to fall on the owner, the remainder being borne by the workmen." — "The Incidence of Imperial and Local Taxation on the Working Classes," in *Essays in Political and Moral Philosophy*. London, 1879, pp. 207–209. In the 2d ed. under the title *Essays in Political Economy*, London, 1888, this passage may be found on pp. 399–401.

¹ One of the most noteworthy of the recent writers to discuss the tax on the occupier is Mr. G. H. Blunden, in an article on "The Incidence of Urban Rates," published in the *Economic Review*, vol. ii, Oct. 1891. Mr. Blunden's conclusions agree in the main with those expressed in the text, with one exception. He seeks to make a distinction between dwelling-houses, and shops or business premises, thinking that rates on shops in the best situation fall on the ground landlord because he possesses a monopoly. But in the first place Mr. Blunden really makes no such distinction, because he tells us (p. 496) that rates on ordinary dwelling-houses in congested areas may also fall on the ground owner, while in less desirable localities, rates, whether on dwelling-houses or on shops, do not fall on the ground owner. Mr. Blunden's distinction is therefore really one between monopoly and competitive sites, not between shops and dwellings. But even this distinction of Mr. Blunden is untenable, for the advantages of sites merge into each other by imperceptible gradations. The relative differences in eligibility between an alleged monopoly site and a less desirable site nominally subject to competition are not altered in the least by the imposition or the remission of a tax which affects both sites proportionally. In his book on *Local Taxation and Finance*, London, 1895, Mr. Blunden seems to modify his distinction between dwelling-houses and shops. See pp. 55, 56.

borne to a considerable extent by the occupier; and only in more or less unusual cases is it shifted by him to the owner of the house or land. The exceptional conditions are to be found in outlying or suburban districts, in decaying quarters, and in cases of extraordinarily high taxes. What in the older theory was considered the rule thus turns out rather to be the exception.

Let us now leave the tax on ground rent and proceed to discuss that part of the tax which is due to the structure, that is, the tax on building rent. The argument here is somewhat simpler.

We have seen that even if an exclusive tax is assessed on the building owner, it will, in normal cases of increasing demand, be shifted in great part to the occupier. *A fortiori*, if the tax is levied on the occupier, it cannot be shifted to the building owner; for a tax paid by the tenant is to all intents and purposes a special tax. There is no other taxable object which can be put in the same category as rent paid by tenants, unless it be the interest paid by debtors. But we have yet to hear of any attempt to tax creditors by levying a tax on interest paid by debtors. In other words, in order to ascertain the actual burden we must add to the nominal rent at all events that part of the tax which is theoretically levied on the structure apart from the soil. In the long run the occupier tends to bear the tax, except in those quarters or under those conditions where the demand suffers a considerable check, or where we are confronted by an absence of competitive conditions.

This holds good, of course, only on the assumption that the rate of the tax is uniform on all the houses concerned. To the extent that the rates vary in different parts of the same town, the excess in any particular case tends to fall ultimately on the owner, not on the occupier. This is simply an instance of a more general law. If a prospective tenant, on whom taxes are levied in first instance, has the choice of two houses of equal desirability but in different parts of the town, the amount of the tax being in one case ten dollars

more than in the other, he will certainly choose the latter house or compel the owner of the former to forego ten dollars of the rent. In England the districts within which the rate of the tax is uniform are much smaller than in America. It frequently happens that different parts of the same city, or even opposite sides of the same street, pay different rates because located in different parishes. In such cases it is fair to make a distinction between the constant and the variable or differential part of the building rate, the latter representing the excess above the rate that is uniform in all the districts. Only the constant part of the building rate will fall on the occupier; the remainder will be borne by the building owner, and in certain favorable cases will be shifted by him to the landowner. This variable element of the building tax, however, will in general be very insignificant in amount, for the reason that, even in England, the normal differences in the rates in city districts which usually have similar expenses are apt to be exceedingly slight.¹ Even in such a case, then, it may be said that the building tax will fall almost entirely on the occupier.²

¹ The contention of Sargant, *Urban Rating*, 1890, p. 49, that the differential rate amounts to two-thirds or even three-quarters of the total tax seems to involve an error. He terms "constant" rate only that part of the tax which is uniform throughout the kingdom. This is arbitrary. In speaking of a differential rate we must always compare two houses of equal desirability or in the same neighborhood; for it is manifestly impossible to say how much of the differential rate falls on the structure, and how much on the plot. We must not compare a house in London with a house in a country parish, because there is no competition between them. The rule holds good only within the narrow range of houses subject to the same competition.

² Fawcett's discussion of this question is unsatisfactory. He makes a distinction between buildings in general and those possessing exceptional advantages of situation. In the former case, rates, he says, are a charge on the occupier; in the latter, on the ground owner. "For if rates were remitted, the saving resulting would simply represent so much added to the ground rent, since rent is fixed by the demand, and the demand would not be altered if rates were remitted." Fawcett's argument can be turned against him. It may equally well be said that, given a certain demand before rates were imposed, the levy of new rates would not change the rent because it would not change the demand. Hence the rates would fall on the occupier who pays them, and not on the ground owner, whose

To sum up, it may be said that, when the local real estate tax is levied according to rental value and assessed in first instance on the occupier, as is the case in England, the main burden of the tax will rest ultimately on the occupier, not on the owner of the premises. For the building tax, as we have seen, will usually rest almost entirely on the occupier; and the building tax forms in almost all cases the larger part of the total tax. The tendency to erect costly structures on valuable sites is, indeed, not quite so strong in England as it is in America, because of the division of ownership between the landlord and the house owner; but the tendency nevertheless exists.

Not only does the building tax normally fall on the occupier, but, as we have seen, the ground tax will generally be borne to a very great extent by the occupier. If we add this portion of the site tax to what is practically the whole of the building tax, we see that by far the larger part of the total local tax falls on the tenant. Even on the assumption that the incidence of the tax on structure is hypothetically the same as that of the tax on site, it still remains true that the tax as a whole tends to rest in considerable part on the occupier, for the reasons that have been advanced in considering the site tax.¹ The determination of the exact proportions is necessarily impossible. Here again, as in the case of the real estate tax, it may be said that in a prosperous and progressive community the tax tends to fall chiefly on the tenant, while in decaying and unprosperous districts the tax tends to fall on the owner; but in all cases more of the tax will tend to be

rent is unchanged. In fact, Fawcett's whole distinction between these classes of houses is untenable. Every house possesses "certain advantages or disadvantages of situation." The advantages merge into each other by imperceptible gradations. Cf. the chapter on "The Incidence of Local Taxation" in his *Manual of Political Economy*, 6th ed., 1883, especially p. 618. On the other hand the commonly accepted doctrine of Ricardo and Mill fails to make either of the distinctions that have been pointed out in the text, for it states that the ground tax falls on the ground owner, and the house tax on the occupier,—each of which statements is partially incorrect, or, at all events, inexact.

¹ Above, pp. 249-255.

borne by the tenant when the tax is originally imposed on him than when the tax is assessed on the owner.¹

¹ It is no wonder, then, that in England the movement for the tax on ground values, assessed on the owner, should now be making such rapid headway. For the English system, with its exemption of the landowner from special assessments for local improvements, and with its casting so large a share of the whole burden on the occupier, is assuredly open to criticism. In Scotland and Ireland the rates are generally divided between occupier and owner. The same plan is now also proposed in England.

CHAPTER IV

INCIDENCE OF TAXES ON PERSONAL PROPERTY, ON CAPITAL AND INTEREST

WHAT is called personal property in English-speaking countries includes not only capital in the economic sense, but consumable commodities not used in production, like books and pictures, and wealth of other kinds, like money. Taxes may be imposed either on property itself or on the revenue derived from property. Since all taxes are nominally paid out of revenue, it is thus immaterial, so far as the question of incidence is concerned, whether we speak of taxes on capital or of those on interest and profits. It has been laid down as a general proposition by a recent writer that "the taxation of property is the taxation of the property owner."¹ The matter, however, is by no means so simple as is assumed.

So far as a tax is laid on personal property which is not capital it cannot be shifted. For instance, if a tax is imposed on the permanent owner of luxuries, like pictures or jewels, he, and he alone, bears the burden. Of this nature are what are known in England as the assessed taxes and in the continental countries as sumptuary taxes. Whatever is held simply for enjoyment and not for sale, provided it is not used for productive or lucrative purposes, is not capital. A tax on such property cannot be shifted, because the property is not sold, and because it produces nothing which can be sold. Here, indeed, the taxation of property is the taxation of the property owner. On the other hand, the incidence of a tax

¹ "The Single Tax." By Charles B. Spahr. In *Political Science Quarterly*, vi, p. 633. Cf. the same author's *An Essay on the Present Distribution of Wealth in the United States*. New York, n.d. (1896), p. 154, note.

on capital or on profits and interest is somewhat more complicated. We may conveniently discuss the subject under three heads:—

A. A uniform tax on all capital or interest.

B. An unequal tax on all capital, or a uniform tax on only some forms of capital or interest.

C. A tax on profits.

It is with this last division only that the English economists have hitherto concerned themselves.

A. A Uniform Tax on all Capital

Let us frankly state, at the outset, that this is only a hypothetical case. It is the theory of the American property tax; but it is not the practice, and it can never be the practice. Why not?

A tax on capital can be unequal in two ways. There may be inequality in the rate, or there may be inequality in the taxable capital. In other words, the tax may be assessed on all capital, but in different proportions; or it may be assessed on only some forms of capital. Now a universal tax on all capital is an impossibility in the modern world. It might be possible in a completely isolated community, where all the inhabitants employed their entire capital within the narrow limits of the community; but in actual life it does not exist. Not only does the tax differ from commonwealth to commonwealth, but the field within which capital is employed is as wide as the world; while the efficacy of any tax law is restricted to a particular state or locality. In other words, the international employment of capital renders a tax on all capital an impossibility. Only on the assumption that every state in the whole world taxed all forms of capital alike could we have such a universal tax. But this is most improbable.

Secondly, even granting that there was such a universal tax, it would still be unequal within the limits of any particular state; for, even if the state attempted to tax all forms of capital at the same rate, it could never succeed. Not only

would there always be some forms of capital within the state which, as all experience has shown, would completely evade taxation, but the same legal rate on various kinds of capital would inevitably be a different actual rate. This is evident when we consider the rate of interest. The rate of interest varies with different kinds of capital, according to the security of the investment, the length of the loan, the state of the money market and a hundred other factors. In New York state, for instance, during a single year the rate of interest has varied from two and a half per cent on certain prime bonds to a few hundred per cent on loanable capital in Wall Street. A uniform rate of tax on capital would thus result in very divergent actual rates on the interest or earnings of various forms of capital. Hence, from whatever point of view we regard it, a uniform tax on all capital is an impossibility.¹

Bearing in mind, then, that a uniform tax on capital is only an hypothesis, let us endeavor to ascertain its incidence. The question, of course, can affect only the capitalist and the borrower. As between them, it is plain that a uniform tax on all capital must fall on the lender, that is, on the capitalist. There would be no way for him to shift the burden. As it is not to be assumed that he would consume his capital unproductively, he would attempt to reimburse himself for the tax either by investing the capital in some business or by lending it to some one else. If he invested it in a business, the demand for loanable capital would decrease as much as the supply, for he would simply be doing what the borrower would otherwise have done. The rate of interest would thus not rise. If he invested it in fixed capital or land, the rate of interest would certainly not tend to rise; for any large investment in fixed capital would simply set free so much circulating capital, that is, the purchase price of the fixed capital. Under either supposition, therefore, the tax could not be shifted.

There is one case, of course, in which the burden of the

¹ Pantaleoni, *Traslazione*, p. 245, has called attention to this fact. His whole discussion on this point is very noteworthy.

tax could be partially evaded. If the tax on capital were so exorbitantly high as to diminish the return to the capital below the rate of what John Stuart Mill calls the practical minimum, further accumulations would be decidedly checked. An attempt would be made by the employers of capital to improve production to such an extent that the enhanced profits would still give them the same net returns as before. This is sometimes the result of taxes on capital; they act as a stimulus to improved methods of production. To the extent that this is not true, however, further accumulations of capital would be discouraged. Even in such a case, however, it does not follow that the tax would be shifted to the borrower. The loss would be felt by the community at large in the shape of a decline in general prosperity. It is impossible to state in advance how much of the burden would be borne by any particular class of the community.¹

B. An Unequal Tax on Capital

Let us now leave the realm of hypothesis and assumption, and come to the facts of every-day life. The actual tax on capital is, as we have seen, everywhere an unequal tax, however equal it may be nominally. The important question thus is: What is the incidence of an unequal tax on capital? Let us discuss the incidence as between (1) the original owner and the new purchaser; (2) the present owner and the borrower; or (3) the producer and the consumer.

1. The Incidence of a Capital Tax as between Original Owner and New Purchaser

This whole subject is governed by the law of the capitalization of incidence, which has already been discussed.² We need thus only repeat our former conclusion. When a new

¹ John Stuart Mill, *Political Economy*, book v, chap. 3, § 3, comes to practically this conclusion in discussing the tax on profits. Properly speaking, the argument is applicable to the tax on capital or interest, as stated in the text.

² Above, pp. 181-186.

or suddenly increased partial tax is imposed on certain kinds of capital, the tax, if it cannot be shifted to the consumer of the article, or if it does not lead to a gradual cessation of the production of the commodity, will be discounted in a depreciation of the capital value of the article by a sum equal to the capitalized value of the annual tax, and will therefore fall on the original owner of the commodity before the tax was imposed or increased, and not on the new purchaser. In other words, when two classes of capital are taxed at unequal rates, the excess of the tax above the average rate tends to be borne by the original holder, because the new purchaser pays so much less for capital on account of the tax. Otherwise he will prefer to invest his money in something else which will bring him the usual interest. It is only when the tax is again increased that the present owner is compelled to bear the new burden. The limitations of the doctrine must, however, not be forgotten;¹ for it is just because of failure to notice these limitations that some writers have fallen into the error of assuming that a tax on capital is always a tax on the capitalist. If a tax could not be shifted, or if it could not destroy the producer, who has bought the business, then indeed the excess of an unequal tax, or the exemption from a tax, would be capitalized or amortized into a change in the capital value of the capital taxed. But, as we shall soon see, it is an error to assume that the tax can never be shifted, or, on the other hand, that it can never injure the purchaser who continues to produce.

2. The Incidence of a Capital Tax as between Debtor and Creditor or Borrower and Lender

To just the same extent that it is difficult for a capitalist to shift a tax which is imposed on all capital, it is easy for him to shift to the borrower a tax which is imposed on only

¹ For a fuller discussion of this doctrine as applied to an important class of capital, see the essay on "Taxation of Corporations," in Seligman, *Essays in Taxation*, pp. 254-258.

some forms of capital. That is to say, in the case of an unequal tax on capital, it is generally the debtor and not the creditor who suffers. How can this be proved?

The rate of interest on capital can rise only through an increase in the demand for capital or through a decrease in the supply of capital. Some writers maintain that demand will increase. It is claimed that if a tax be imposed on the capitalist lender, and if, accordingly, the borrower be now allowed to deduct from his taxable property the amount of the loan, the borrower will be able to pay a higher rate of interest. Since he is no longer taxed on the debt, he will be able to lay aside more. This will increase his effective demand for additional capital. Because of this increased competition for capital, the rate of interest will rise, so as to leave the creditor uninjured, notwithstanding the imposition of the tax.¹

This argument, however, as Rau has shown, is inadequate.² In the first place, it is not necessarily true that the borrower is allowed to deduct his debts from his taxable property; in the American commonwealths it is frequently the rule that debts cannot be deducted from personal property. Secondly, even if debts are deducted, it does not follow that the competition for capital will increase; for only a part of the debts will have been contracted for industrial purposes, while a portion will have been the result of losses or accidents. An amelioration in the condition of the debtor will therefore just as frequently result in a payment of old debts as in a contraction of new debts. Thirdly, if an increase of the debtor's profits (due, for instance, to the exemption of the debt from taxation) enhances the demand for capital, every decrease in the rate of interest would do the same; and this increased demand would counterbalance the decrease in the rate, so

¹ This is the argument of Kröncke, *Grundsätze einer gerechten Besteuerung*, 1819, pp. 130-138. Cf. the same author's *Ausführliche Einleitung zur Regulierung der Steuern*, 1810, p. 35.

² Rau, *Finanzwissenschaft*, §§ 381, 382, vol. ii, pp. 156, 157 (5th edition). Cf. also Pantaleoni, *Trasmissione dei Tributi*, pp. 253-255.

that interest could never permanently fall. But this is manifestly untrue. Hence the argument that a tax on capital will increase demand is untenable.

On the other hand, the argument that the supply will decrease is more successful; in fact, this is the real basis of the whole theory of the shifting of the capital tax, whether it be a tax on mortgages or on any other form of loanable capital. The argument was first advanced by Turgot,¹ and rests really on the fundamental assumption of the mobility of capital. Capital, it is said, shows its mobility in two ways: if employed unremuneratively, it will be removed or transferred either to some other industry or occupation within the country, which affords higher gains because untaxed, or it will be removed to another country where the same industry or occupation is not taxed. In other words, there is both an internal and an international migration of capital continually going on—a migration from industry to industry, and one from country to country. Capital, the argument continues, always seeks to secure the highest returns. Impose a tax on the capitalist lender, and he will insist on an increase of the rate of interest tantamount to the tax, or else will transfer his capital to some untaxed occupation within or without the country.

But while it is abstractly true that a special tax on capital will be shifted to the borrower, it often happens in practice that the assumed absolute mobility of capital is countervailed by other forces that may be summed up under the name of economic friction. These opposing influences may be classified as follows: (1) ignorance of the capitalist; (2) difficulty of removing the capital; (3) risk connected with the migration to other countries; (4) social or other considerations which make for permanence of investment; (5) legal obstacles.

Ignorance of the capitalist, it may be confessed, is not of very material importance. In a highly developed industrial

¹ Turgot, "Observations sur un Mémoire de M. de Saint-Péravy en faveur de l'Impôt Indirect," in his *Œuvres* (Daire's ed.), i, p. 423. See above, p. 109.

organism, under the modern régime of interchange of thought and communication of news, the fact of extraordinary profits in any particular occupation cannot be long concealed. Especially the distinction which concerns us here — that between taxed and untaxed capital — must be obvious to the average investor. With the growth of modern society the ignorance of the investor is a factor of continually decreasing moment.¹

More important is the difficulty of removing capital to more lucrative employments. Of course, in the case of loanable capital, as in the stock exchanges of to-day, this difficulty is reduced to a minimum. But in proportion as the capital assumes more and more of a fixed character, its mobility grows gradually less. To transfer investments from one stock to another is a very different matter from abandoning all the plant and machinery in one business in order to enter upon another occupation.

The risk connected with investments in foreign countries is likewise not so great as it formerly was. It is indeed true that creditors, as a rule, like to be near their debtors. American capitalists prefer the less remunerative mortgages in the East to the high interest-paying investments in the Western states. Moreover, it frequently happens that home investors or domestic corporations are treated more leniently, both as regards taxation and in other respects, than foreigners. It is the survival of the old law of aliens. This check on interstate or international transfer of capital is, however, gradually losing its potency.

Social considerations of various kinds often interpose a more serious obstacle. It is not always strictly true, as Adam Smith said, that "the proprietor of stock is properly a citizen of the world, and not attached to any particular country." Feelings of patriotism, of local pride, of desire of proximity to friends, of long custom and old usage, sometimes play a considerable rôle. Although they may be called non-economic

¹ For a proof that it is of some importance, cf. Cliffe-Leslie, "On the Philosophical Method of Political Economy," in his *Essays in Political and Moral Philosophy*, pp. 235-237.

motives, they are none the less to be reckoned with by the economist.

Finally, the law may prevent the free migration of capital. Under the American state bank laws, for instance, there was very generally a provision that banks could invest their deposits only in certain specified state securities or mortgages. The large demand for state mortgages in such cases may have contributed toward lowering the usual interest allowed on the mortgage, and may thus have prevented the whole of the burden of the tax from being shifted to the borrower.

While, therefore, it may be laid down as a general rule that a tax on loanable capital will be shifted from the creditor to the debtor, the conditions which interfere with the absolutely free mobility of capital may be sufficiently strong to prevent this transference of the tax from becoming entirely complete. The application of this principle to the great question of taxation of mortgages in the United States is obvious.

3. The Incidence of a Capital Tax as between Producer and Consumer

This is practically the same as a tax on profits. The investor of capital in a productive industry does not make any but an arbitrary distinction between his interest and his profits on the investment. The rate of interest is fixed by the relative amount of loanable capital, that is, it is a matter of adjustment between borrower and lender. But as soon as it becomes a question of adding the tax to the price of the goods the problem is the same as that of the tax on profits. This topic is of sufficient importance to demand a separate chapter.

CHAPTER V

TAXES ON PROFITS

IN discussing the incidence of a tax on profits, as between producer and consumer, it is necessary to make several distinctions. Profits may be taxed directly, as when the tax is imposed on the net receipts or profits of the producer; or they may be taxed indirectly, as in the case of a fixed license, or of a tax on stock in trade, or of a tax on sales. Taxes on sales, however, may themselves be subdivided into two categories. The producer may, in the one case, be taxed on the amount of commodities produced or sold by him. This is equivalent to a so-called indirect tax on commodities. It is immaterial, from the standpoint of incidence, whether such a tax is raised from the producer or from the consumer. In the other case, the producer may be taxed, not on the quantity produced, but on the gross receipts from sales—which is not necessarily the same thing. As an indirect tax on profits, a tax on gross receipts occupies, as it were, an intermediate position. It is, in some sort, a cross between a tax on net receipts and a tax on the quantity sold.

Consequently, if we use the term “profits” in the wider sense, to signify the revenue which accrues from the sale or exchange of commodities, there are really four chief kinds of taxes which affect profits and thus influence the relation between producer and consumer. These are:—

1. A tax varying with gross production or gross amount sold.
2. A tax varying with gross receipts.
3. A tax varying with net receipts.
4. A tax of fixed amount.

1. A Tax on Gross Production or Gross Amount sold

This is practically the same as a tax on commodities. Whether the tax is a so-called "indirect" tax, levied on the commodities, or whether it is levied on the producer according to each unit produced or sold, is immaterial. Thus, in some of the American commonwealths, the taxes on sewing-machine companies or telephone companies are proportioned to each sewing-machine or telephone sold or produced. This is the same, so far as the question of incidence is concerned, as if an indirect tax had been levied on each machine or telephone.

Let us mention first the case of a tax on particular commodities produced or sold under the law of competition. This case is the normal one which has been treated above in the chapter on general principles. We have, therefore, only to repeat the general conclusions there reached,¹ namely, that the tax is apt to be shifted to the consumer in whole or in part, but that the degree to which the tax is shifted varies inversely as the elasticity of the demand and directly as the elasticity of the supply.

In most cases the tendency of an increase in price is to diminish the demand and, therefore, the output; but if the falling off in demand is so slight that the former marginal producer still remains the marginal producer, or if the margin between the price and the cost to the more efficient producer is so slight that he cannot crowd out the former marginal producer, then the whole of the tax will be shifted to the consumer. This is a frequent case — perhaps even the ordinary case — under the régime of competition. But conditions may arise under which only a part of the tax will be shifted. These conditions will be present when an industry has not only reached the point of diminishing returns, but has for some time been obeying that law, so that any increase of price due to the tax will lead to a smaller output with a lower

¹ Above, p. 213.

marginal cost, and therefore to a new price below the old price with the whole tax added.¹ But the same result—the incomplete shifting of the tax—will follow when, owing to the imposition of the tax, the former marginal producer is now replaced by a new marginal producer who can supply the product at a lower cost, and when the new price will now be a little (or perhaps even much) less than the old price, or the old marginal cost, with the tax added. The ordinary conditions of progress, as we know, result in a continual crowding out of the marginal producer by more favored competitors. This process will be accelerated, and the marginal producer will be replaced more quickly, as we have seen: first, when the demand for the commodity is very elastic; second, when there is a great difference in the efficiency of the various producers; and third, when the industry obeys the law of increasing rather than of diminishing returns.²

To the extent that the imposition of a tax hastens this process, the tendency will be that somewhat less than the whole of the tax will be shifted. For the entire tax will be shifted only so long as the old marginal producer still remains. To what degree, now, will a tax accelerate this process?

A tax on output—that is, on each unit produced—will normally affect the elasticity of the demand, and thus the amount produced. If this diminution of output is divided proportionally among all competitors, it will not change their relative positions. But if there is a great difference in the efficiency of the various producers, and if the imposition of a tax, by making it more difficult for the marginal producer to hold his own, brings about a greater diminution in his output than in that of his competitors, the tendency for the larger producer to crowd out the smaller will be accentuated; and, because of the economies in production, somewhat less than the entire tax will be added to the price. If, however, the movement toward concentration goes far enough to produce a complete monopoly, price will be fixed by conditions

¹ See above, p. 208.

² See above, pp. 202, 203.

of monopoly value to be discussed in a moment; and while ordinarily only a part of the tax or the whole tax will be added to the price, exceptional cases may occur where the monopoly is so secure and the demand so stable that the new price may even exceed the old price with the tax added. A good example of such an exceptional result is the match tax during the Civil War.¹

When the competitive industry obeys the law of increasing returns, it is necessary to make a distinction. The fact that an industry is subject to the law of increasing returns tends, as we know, strongly toward concentration; but as long as the old competitors are left—that is, in the interval during which the old marginal producer continues to produce—the smaller output, due to the imposition of the tax, will be supplied at a higher marginal cost, and the new price will not tend to be less than the old price with the tax added.² But after the process has been completed—if it is ever completed—and the industry is now monopolized, the price may not be quite so high as before, because under conditions of monopoly, other things being equal, the influence of the law of increasing returns is to raise the price by somewhat less than the tax.³ The interesting corollary from the above considerations is that in the transitional cases of competitive industries subject to the law of increasing returns, the tendency toward monopoly is checked rather than accelerated by a tax on output; while, in the usual case of competitive industries subject to the law of diminishing returns, the imposition of a tax—under certain conditions at least—may weaken the forces that oppose the tendency toward monopoly and may make it more difficult for the small producer to remain in business.

We may sum up, therefore, by saying that in the case of competition the usual result of a tax on output or gross amount produced or sold is that the entire tax will be shifted to the consumer, but that special cases may arise where the price will be augmented by only a part of the tax. Such

¹ See below, p. 283.

² See above, p. 207.

³ See above, p. 205.

special cases are chiefly to be found not only when the industry has been obeying the law of diminishing returns, but also when the tax enables a more capable producer to undersell his former competitors at the margin of profitable production.

We come next to the case of a monopoly. The law of monopoly value is, we remember, in some respects different from that of competitive value. The monopolist will always demand the very highest price at which he can sell the greatest number of products. To the extent that his monopoly is complete ~~he~~ is uninfluenced by the fact that the article might be produced more cheaply by others,—a consideration of vital importance in the whole domain of competitive prices. So far as concerns the incidence of the particular tax with which we are at present dealing—namely, that on gross production or on commodities—the monopolist and the competitive producer are, however, in some respects subject to practically the same influences.

If a tax is imposed on every article produced, the monopolist may prefer to restrict his production and to raise his price. Although he sells less than before, because of the increased price, his net profits may be larger, because he pays a smaller tax than he would pay if he produced more extensively. Although his gross receipts diminish, his expenses diminish still more. If the tax is small and the demand is apt to fall off a great deal with an increase of price, the monopolist will be likely to find it profitable to bear more of the tax himself. If, on the other hand, the demand is less elastic, he will be apt to shift more and more of the tax to the consumer. The degree to which he will add the tax to the price depends chiefly on the height of the tax as compared with the extent of the production and the elasticity of the demand. In these respects the influence of a tax under conditions of monopoly is akin to that of a tax under conditions of competition. On the other hand, when the minor qualification of the ratio of product to cost is introduced, the analogy between conditions of monopoly and competition disappears. As we have seen,

if the monopoly industry obeys the law of increasing returns, the tendency is that less of the tax will be added than if it obeys the law of diminishing returns; while in the case of competition the tendency is the reverse.¹ Since the existence of the law of increasing returns is most favorable to the continuance of a monopoly, and since the great mass of so-called economic monopolies have become such precisely because they are subject to the law of increasing returns, the conclusion is warranted that in the ordinary cases of these monopolies when a tax is imposed on gross product, even though the monopolist shifts a part of the tax to the consumer, he will shift less of the tax than he would have done had he produced under conditions of competition.

The important point to be noticed, however, is that in the case of the taxation of gross product the monopolist may, and generally will, shift the tax to the consumer, even though he shifts less of the tax than would be the case if he were not a monopolist. We shall very soon see that in the case of some other taxes there is, in respect to the question of incidence, a sharp line of distinction between monopoly price and competitive price. Even in the case of the tax on gross product, however, there are some differences between the régime of monopoly and of competition. One of these differences is connected with the consideration of the ratio of product to cost, which has just been mentioned. Another is that, in the case of monopoly, while the tax will ordinarily be shifted in whole or in part, it may happen that no part of the tax will be shifted at all.² Let

¹ See above, pp. 203-210.

² Professor Graziani, in his *Istituzioni di Scienza delle Finanze*, p. 335, substantially accepts, on this particular point, the argument in the text. Professor Edgeworth, who originally criticised the statement in the text in the *Economic Journal*, vii, p. 227, made the same criticism of Professor Graziani's subsequent acceptance of this position in a review of the latter's work in the *Economic Journal*, vii, pp. 405, 406. Professor Graziani came to the defence of his position in a reply entitled *Sulla Repercussione delle Imposte nei Casi di Monopolio*, published in the *Studi Senesi*, xiv, p. 5, and also separately (Turin, 1898). A rejoinder to this by Professor Edgeworth appeared in the *Economic Journal*, viii, pp. 234-236.

us proceed to consider this possibility somewhat more in detail.

Let it be assumed that a monopolist can sell, at the price of \$5 each, 1000 units of a particular article. Let it be further assumed that the cost of each unit is \$2. His gross receipts will then be \$5000, and his net profits $(5 - 2) \times 1000 = \$3000$, which may be declared to be his maximum monopoly revenue. If he charged more, the sales would fall off; if he charged less, the receipts would be smaller. In either case his net profits would diminish. Let it be assumed that, if he charged \$6 a unit, the sale would fall off to 700 units. His gross receipts would be $6 \times 700 = \$4200$, and his net profits $(6 - 2) \times 700 = \$2800$, or less than before. If, on the contrary, he charged only \$4 a unit, his sales would increase, let us say, to 1200 units, his gross receipts would be \$4800, and his net profits $(4 - 2) \times 1200 = \$2400$. He will therefore always prefer the price \$5, which marks the point of maximum monopoly revenue.

If the government now imposes a tax of \$1 a unit, what will be the result? The net return on each unit is reduced to \$2, the total net profits to \$2000. If the monopolist attempts to add the whole tax to the price, he will sell only 700 units; and since the cost per unit has been increased by the tax to \$3, his net profits will be $700 \times (6 - 3) = \$2100$. Granting that this is the highest net return that the new conditions admit, the monopolist will increase the price from \$5 (which gives him \$2000 profits) to \$6 (which gives him \$2100 profits). The entire tax will be shifted to the consumer.

On the other hand suppose that the tax is only $\frac{1}{4}$ of a dollar. Then the cost per unit would be $2\frac{1}{4}$, the net profits at price \$5 would be $(5 - 2\frac{1}{4}) \times 1000 = 2\frac{3}{4} \times 1000 = \2750 ; while the net profits at price \$6 would be $(6 - 2\frac{1}{4}) \times 700 = 3\frac{3}{4} \times 700 = \2625 . Admitting that other prices yield profits likewise inferior, the monopolist would continue to charge only \$5; that is, he would not raise prices at all.

It might be said, however, that the admission in the last

sentence is not permissible.¹ A simple arithmetical example, however, will show that the conditions may arise under which any other price than the original one would give the monopolist less net profits.

Let it be assumed that, instead of adding the whole tax to the price, the monopolist adds only part of it. Let it be further assumed that at price $\$5\frac{1}{4}$ he will sell 900 units; at price $\$5\frac{1}{2}$, 825 units; at price $\$5\frac{3}{4}$, 750 units; and, as we have already previously stated, at price $\$6$, 700 units. His net profits, then, after a tax of $\frac{1}{4}$ of a dollar had been imposed, would be:—

At price 5 . . .	$(5 - 2\frac{1}{4}) \times 1000 = 2\frac{3}{4} \times 1000 = \$2750.$
At price $5\frac{1}{4}$. . .	$(5\frac{1}{4} - 2\frac{1}{4}) \times 900 = 3 \times 900 = \$2700.$
At price $5\frac{1}{2}$. . .	$(5\frac{1}{2} - 2\frac{1}{4}) \times 825 = 3\frac{1}{4} \times 800 = \$2681.25.$
At price $5\frac{3}{4}$. . .	$(5\frac{3}{4} - 2\frac{1}{4}) \times 750 = 3\frac{1}{2} \times 750 = \$2625.$
At price 6 . . .	$(6 - 2\frac{1}{4}) \times 700 = 3\frac{3}{4} \times 700 = \$2625.$

In other words the monopolist will continue to find his greatest profits in continuing to charge the original price, $\$5$. It is clear, therefore, that cases may arise in which it will be profitable for the monopolist to bear the burden himself.² No part of the tax will be shifted to the consumer.

¹ Professor Edgeworth, for instance, urges this criticism. The only cases in which it is possible for the monopolist to bear the whole tax himself, says he, are (a) when it is not in the power of the monopolist to increase his output, and (b) when the monopolist is the sole buyer. Cf. *Economic Journal*, vii, p. 227. That these are not the only cases, however, is clear from the argument in the text.

² Cournot states that the tax must *always* be shifted (except in the cases mentioned in the preceding note). Professor Edgeworth (*Economic Journal*, vii, p. 405) thinks that this is true "in general." Later, when hard pressed by Professor Graziani, he seeks to maintain his position by assuming that "the change of price is small," "by taking Δp sufficiently small" (*Economic Journal*, viii, p. 235). But is it fair to assume that a small change of price is "more general" than a great one? And would Professor Edgeworth's elaborate formulæ all hold good, if the change of price were substantial? It is not denied that, if we varied the figures in the text, it might happen that when the cost per piece were $2\frac{1}{4}$, the price which yields maximum profit might become greater than 5. What it is sought to prove by the above illustration is that this result does not *necessarily* follow. We venture, therefore, still to cling to the position in the text, notwithstanding that, in the opinion of Professor Edgeworth, the opposite point has been "proved formally and mathematically by Cournot, informally and in plain prose" by himself. See *Economic Journal*, vii, p. 405, note 1. Knut Wicksell, on the

Granting, however, that this is exceptional, and that in ordinary cases the monopolist will shift at least a part of the burden, it was stated above¹ that the more elastic the demand, the smaller the proportion of the tax that he would be apt to shift to the consumer. It may be wise to illustrate this also by some simple arithmetical figures.²

Demand is said to be more elastic when each successive increase of price leads to a greater falling off in demand. The example above was based on the assumption that, at the price of \$6, the demand would fall to 700. Let us now assume that, with a more elastic demand, the sales at price \$6 would fall off as far as 675 units; and let us further assume that, with a more stable demand, the sales at the price \$6 would fall off only to 725 units. Now, with the more elastic demand, the net profits would be, after the tax of \$1 per unit was imposed $(6 - 3) \times 675 = \$2025$; but with the less elastic or more stable demand, the net profits would be $(6 - 3) \times 725 = \$2175$. Hence, the more stable the demand, the greater the chances of his increasing the price by the whole tax.³

The validity of this statement may be seen from a *reductio*

other hand, thinks that, theoretically, the monopolist will always add the tax to the price, but that practically he will often *not* do so. — *Finanztheoretische Untersuchungen*, p. 12.

¹ See p. 204.

² Especially because the proposition has recently been assailed, again by Professor Edgeworth, in *Economic Journal*, vii, p. 227, note 4, and in his criticism of Professor Graziani's acceptance of the above contention in *ibid.*, vii, p. 406, and viii, pp. 237, 238. For Professor Graziani's rejoinder, see *Sulla Repercussione*, etc., pp. 6, 7.

³ It is not permissible to say that, if this were true, the monopolist would have raised the price before the imposition of the tax. For, according to our hypothesis, the net profits at the original price of \$5 were \$3000; and with a sale of 725 units at the price of \$6 without the tax, his real profits would still be only $(6 - 2) \times 725 = \$2900$. It is only when the elasticity is indefinitely small that such a result would follow. As Professor Edgeworth observes, we must assume some elasticity, for otherwise equilibrium would not have been reached. The monopolist would have gone on raising prices until checked by a sensible elasticity. The objection urged by Knut Wicksell, *Theoretische Untersuchungen*, p. 12, is therefore not well taken.

ad absurdum of the opposite. Suppose it were true that, the more elastic the demand, the greater the chance that the monopolist would add the tax to the price. Then it would follow that, if at the price of \$6 the demand fell off to 500, the net profits of the monopolist would be $(6 - 3) \times 500 = \$1500$; if to 400, then $(6 - 3) \times 400 = \$1200$; if to 300, then $(6 - 3) \times 300 = \$900$, and so on. In other words, the monopolist would, in each case, prefer the smaller net profits to the higher ones—which is absurd.¹ It remains true, therefore, that the degree to which the tax will be added to the price varies, other things being equal, inversely with the elasticity of the demand.

We see then that the validity of the general law as stated above² is substantiated, and that in the case of monopoly the degree to which the price will be increased by a tax depends upon the height of the tax as compared on the one hand with the ratio of product to cost, and on the other hand with the elasticity of the demand.

If we consider the ulterior effects of a tax on the gross product of a monopoly, some interesting conclusions force themselves on our attention. Let us take up those cases in which the monopolist will generally add the tax to the price. To this extent he will have shifted the tax to the consumer; but that does not mean that he suffers no loss. On the contrary, since the increased price means reduced sales, the net profits of the monopolist will, as we have seen, be smaller than before the tax. He therefore loses also. The tax he pays to the government is, indeed, smaller than it would have been if he had continued to produce as much as before; and in this sense we can speak of a partial evasion of the tax. That is, taking the figures used above in the illustration of normal conditions, the tax of \$1 per unit amounts to \$1000

¹ The error of Professor Edgeworth seems to consist in the assumption that the demand curve is continuous,—that, if an increase of price leads to such a sudden falling off in demand, a decrease of price will lead to a similar jump in demand. But this does not necessarily or even ordinarily follow. Cf. the con-

when 1000 units are sold ; but since the change of price from \$5 to \$6 cuts down the sales to only 700 units, the government then receives only \$700. The producer thus evades the tax to the extent of \$300, but he also suffers a considerable loss. For, while his net profits before the imposition of the tax were \$3000, his net profits, after he raises the price by the entire amount of the tax, are only \$2100. He thus loses \$900, although he technically shifts the tax. Moreover, the consumers also lose. Those who pay the increased price can measure their loss in dollars and cents ; for, if the tax is shifted completely, they pay the total amount of the tax. Those who have been compelled, by the increase of price, to forego the article and to content themselves with something inferior, also suffer a loss, even though it cannot be definitely expressed. The only persons who gain are the producers of the new commodity which some of the consumers now substitute for the old one. This gain, however, which also cannot be expressed numerically, will ordinarily be smaller than the loss suffered by the producers of the original article. Even though a tax on gross product be shifted to the consumer, in the sense of causing a rise in price, it is apt to inflict a loss on the producer as well as on the consumer ; and this loss to both classes may exceed the total yield of the tax to the government. In the above extreme case the producers lose \$900, the consumers, whose loss can be computed numerically, lose \$700, or \$1600 together, while the tax yields only \$700. The possible dangers of taxes on gross product are thus apparent.¹

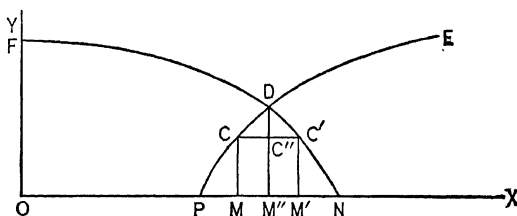
¹ The above reasoning may be illustrated graphically as well as arithmetically. Fleeming Jenkin, "On the Principles which Regulate the Incidence of Taxes," in *Proceedings of Royal Society of Edinburgh*, Session 1871-1872, p. 624 (republished in *Papers, Literary, Scientific*, etc., by the late Fleeming Jenkin, edited by Colvin and Ewing, 1887, ii, p. 113), made use of the diagram on the next page.

FN is the demand curve, *PE* the supply curve, *CC'* the amount of tax per unit. Then *OM* is the market price to the supplier, *OM'* the market price to the buyer, and *MM'* the tax.

The amount raised by the tax is *MCC'M'*, the portion paid by the seller *CC'M'M*, the portion paid by the buyer *C'M'M'*. The whole loss to the community is *MCD'C'M'*, the loss to the sellers *CDM'M*, the loss to the buyers

The case of a bounty is just the reverse of a tax. It can be proved in the same way that, while a bounty ordinarily benefits only the producer and brings no advantage to the consumer, cases may possibly occur where the result of a bounty will be not only an increase of the profits of the producer, but also a decrease of the cost to the consumer. This is the reason why bounties have generally been given; namely, to educate the producer to that point where he may find it profitable to reduce prices. But these instances are very exceptional, just as was the preceding case of a tax that cost the producer and the consumer far more than it yields to the government. Such cases, moreover, cannot be advanced as arguments in favor of the policy of bounties in general; for, ordinarily, the loss occasioned to the taxpayers who pay in taxes the amount distributed as a bounty more than outweighs the benefits to the special classes who are

$M''DC'M'$. Both buyers and sellers suffer a loss beyond the tax. The sellers suffer a loss $CC''D$, the buyers suffer a loss $C'C''D$. If the tax is large, CC' will approach the axis OX . Then the tax will be unproductive, and the excess of loss to buyers and sellers, $CC'D$, will be large.



Of course, according as the industry obeys the law of constant returns, or of increasing returns, the supply curve PE will tend to curve differently. Conversely, according to the elasticity of the demand, the demand curve FN will tend to be parallel to EO . Jenkin did not modify his diagram to meet these conditions. But Professor Marshall has made the changes in his *Principles of Economics*, 3d ed., pp. 523-525, to which the reader is referred. Marshall, however, applied his diagrams only to consumers' rent, *i.e.* to what Jenkin called $C'C''D$. It is equally applicable to the producers' rent. The whole analysis is outlined by Cournot in his *Principes Mathématiques*, pp. 78-82 (English translation, pp. 71-75), and more especially in his *Principes de la Théorie des Richesses*, pp. 374-378. But so far as concerns the laws of decreasing and increasing cost, the reader is reminded of the discussion above, pp. 204-206.

deemed to derive a benefit from the bounty. It is for this reason that modern governments grant bounties only in the exceptional instances mentioned above.

Returning now to the consideration of taxes on gross product in general, irrespective of the fact whether the industry is subject to the law of monopoly or of competition, attention must be called to a point in which many have committed a serious error. Cournot, for instance, maintained that a tax, whether on a monopoly or on a competitive commodity, may raise the price to an extent greater than the amount of the tax. The chief reason he advanced for this phenomenon was that the price paid by the consumer must include not only the tax but the interest on the sum necessary to pay the tax, and the profits of the middlemen. The necessary conclusion was that it is always wiser to assess the tax at as late a stage as possible — that is, on the consumer himself — since the collection of the tax becomes more costly, more vexatious, and more burdensome to the community in proportion as the assessment of the tax approaches the producers. The consumers will have to pay more than the government receives.¹

This theory of Cournot is, however, nothing but the accepted doctrine of Adam Smith, Ricardo and Mill. Adam Smith puts the idea into the plainest form when he says:—

“A tax upon these articles (necessaries of life) necessarily raises their price somewhat higher than the amount of the tax, because the dealer who advances the tax must generally get it back with a profit. His employer, if he is a manufacturer, will charge upon the price of his goods this rise of wages, together with a profit; so that the final payment of the tax, together with this exchange, will fall upon the

¹ Cournot argues on p. 78 of the *Principes Mathématiques* (English translation, p. 70) that, owing to the “additional charges arising from interest,” “the commodity will be sold at a higher price just in proportion as the tax is prematurely collected.” Cf. the corresponding statement in his *Principes de la Théorie des Richesses*, p. 273, as to competitive conditions.

consumer. The final payment of both the one and the other (taxes on necessities and on labor) falls altogether on themselves (the consumers) and always with a considerable overcharge."¹

So also this is what Ricardo means when he says that "the taxing of all commodities will raise the price by a sum at least equal to the tax,"²—a remark which, as we have seen, is not necessarily true. So Du Puynode, Parieu and many other writers make the same statement. Fawcett calls this the most serious objection against taxes on commodities.³

This whole theory rests on the old doctrine of normal or natural profits. As soon as we remember that, according to the modern theory, actual profits are simply the surplus over marginal cost, the doctrine falls to the ground. The middleman cannot add his profits to the price, because in a state of competition price is fixed at any given moment at the cost of the most expensive increment. If there were such a thing as normal profits, the price of the article would indeed be increased with each transfer, until the ultimate price might immensely exceed the tax. But there is, under competitive conditions, always a producer or middleman on the margin of production—that is, one who produces or handles the product without profits, simply getting back his expenses—and the price of the whole supply, at any given moment, is equal to his cost of doing the business. The profits are

¹ *Wealth of Nations*, book v, chap. ii (Rogers' ed., ii, pp. 468-470).

² *Principles of Political Economy and Taxation*, chap. xvii (McCulloch's ed., p. 186). Cf. Mill, *Principles*, book v, chap iv, § 2.

³ Du Puynode, *De la Monnaie, du Crédit et de l'Impôt*, ii, p. 210; Parieu, *Traité des Impôts*, i, p. 165; Sayer, *The Income Tax*, 1833, pp. 58, 59; Fawcett, *Political Economy*, pp. 550, 551 (6th ed.). The most recent repetition of the statement is by Sidney and Beatrice Webb in their *Industrial Democracy*, 1898, p. 303. "At every 'repercussion' of the tax, there would be an additional 'loading,' so that the ultimate charge to the consumer would, as in the case of excise duties on raw materials, far exceed the original sum."

The theory itself may, as we know, be traced back to a period anterior to Adam Smith. It is found in Fauquier, in Decker and in other writers of the time. See above, p. 17, 56.

obtained only by the more fortunate or more skilful individuals. The mere fact that the product passes through a number of hands cannot in itself raise the price by more than the exact cost of such transference. Cost, however, does not include profits; cost is the condition of profit. Otherwise retail prices would increase geometrically, according to the number of retailers—a conclusion which is obviously untrue. The tax is simply an addition to the cost of production; and there can be no geometrical increase in the tax. As soon as we abandon the normal profits theory, then we see how inaccurate is the excess-of-price-above-tax doctrine. The doctrine assumes not only that the producer is a monopolist, but that every middleman is a monopolist also. Only on this assumption can there be no no-profits middleman. The assumption, however, is not practicable in treating conditions of actual life.¹

There is, indeed, one way in which the price of an article may be driven up beyond the amount of the tax—a way suggested in the last sentence, but involving considerations very different from those just discussed. Since a tax on production or on commodities must generally be advanced before the producer has received payment for his sales, the necessity of raising the funds will bear more heavily on the smaller producers. In fact, under given conditions of elasticity of demand, such a tax, especially if it be high, tends to increase the advantages of the powerful producer. When the conditions are sufficiently favorable, the imposition of a tax may thus be the direct cause of the creation of monopoly. But it is then primarily the monopoly, and only indirectly the tax, which enables the producer to raise the price far above its previous level. Conversely, the repeal of a tax may reduce the price by an amount far greater than the tax, because what was formerly a monopoly may now become subject to competition. As a good example of this tendency may be mentioned the tax on matches in the United States

¹ Cf. Gunton, *Principles of Social Economics*, p. 380. His conclusions are in other respects, however, questionable.

during the Civil War, the imposition of which created a monopoly with high prices, and the abolition of which caused a fall in price considerably greater than the amount of the tax. Again, the proposed reduction of taxes on certain commodities — for example, tobacco — was opposed in the United States by the large manufacturers and importers, because the higher the tax the greater the advantage of the large dealer. But it is primarily because of the monopoly, and only indirectly because of the tax, that prices are thus raised unduly.¹

The whole question of the incidence of import or export duties is virtually identical with the one discussed in the preceding cases; for import and export duties are usually levied at given rates per units of the commodities, whether the units be those of weight or of value; that is, whether the rate be specific or *ad valorem*. It will be readily seen, therefore, how erroneous is the doctrine of those extremists who maintain that the loss to the consumer is always and necessarily measured by the proceeds of the import duties. On the contrary, it may happen that prices will rise by something less than the tax; and it is conceivable, although not probable, that prices may not rise at all. When, for example, the foreign producer fears that the increase of price by the total amount of the tax will so materially reduce his sales as to render his net profits lower than they would be if he assumed a part of the tax himself, prices may rise by something less than the tax. On the other hand, it may happen that the loss to the consumer will be more than the amount

¹ There is another case in which a tax may increase the price of a commodity by more than the amount of the tax. This is the case where a smaller tax is imposed on the producer of a larger quantity of units than on the producer of a smaller quantity. In industrial operations in general such a tax is well-nigh unknown. It would be what the French call an "upside down progressive tax." But in agriculture it has happened that a uniform tax is imposed per acre, while the productivity of the land varies. In such a case, the tax would involve a lower rate, per bushel of wheat for instance, on the more productive land than on the less fertile land; and, as long as the less fertile land contributed a part of the necessary supply, the price of the product would rise by more than the amount of the tax. The case is worked out arithmetically above on p. 225.

of the tax. It is impossible to lay down any exact and universal rule; attention must always be paid to the given conditions of the particular case. The application of the principle is so important, however, that it merits a fuller discussion, which will be reserved for another chapter.¹

2. A Tax on Gross Receipts

A tax on gross receipts must not be confounded with a tax on sales (in the sense of a tax proportional to the number of commodities sold) or with a tax on gross product. A tax on sales or on product varies with the amount sold or produced. But gross receipts may be larger with small sales than with large sales, provided prices are higher. Conversely, gross receipts may be smaller with large sales than with small sales, provided prices are lower.

If we take up first the case of competition, it is clear that there can be in the given market only one price—that equivalent to the cost of production of the dearest increment of the temporary supply. Now a tax on gross receipts necessarily increases the expenses of this dearest increment; for the producer at the margin of profitable production, whose gross receipts afford him only a bare return for his outlay, without any profits, must add the tax to his price, if he is to remain as a competitor at all. In the end, therefore, the tax must be shifted. The extent, however, to which the tax will be shifted at any particular time will depend on the considerations that were discussed in the case of a tax on gross product; that is, on the elasticity of the demand as compared with the elasticity of the supply.

In the case of monopoly the same effects are also generally observable. Although the increase of price will lead to a falling off in the demand, and although the gross receipts may even be less than before, the net profits of the monopolist will generally be greater, because of the diminution of the expenses due to the decrease of the output, and because the tax on the

¹ See below, pp. 300 *et seq.*

sible that the demand may fall off largely for the initial increments of price, and less largely thereafter. Let us utilize, in other words, a hypothesis similar to the one already mentioned,¹ where, instead of the demand falling off by 100 units for every one-quarter of a dollar added to the price, the demand at price \$5 amounts to 1000; at price $5\frac{1}{4}$, to 900; at price $5\frac{1}{2}$, to 825; at price $5\frac{3}{4}$, to 750; and at price \$6, to 700. If a tax of ten per cent on gross receipts be now imposed, the figures will be as follows:—

At Price	Gross receipts	10% tax
\$5	5 × \$1000 = \$5000	\$500
$5\frac{1}{4}$	$5\frac{1}{4}$ × 900 = 4725	472.50
$5\frac{1}{2}$	$5\frac{1}{2}$ × 825 = 4537.50	453.75
$5\frac{3}{4}$	$5\frac{3}{4}$ × 750 = 4312.50	431.25
6	6 × 700 = 4200	420

The expenses will be the cost of production plus the tax, or

At Price	Cost of production	plus tax	equals total expenses
\$5	2 × \$1000 = \$2000	+ \$500	= \$2500
$5\frac{1}{4}$	2 × 900 = 1800	+ 472.50	= 2272.50
$5\frac{1}{2}$	2 × 825 = 1650	+ 453.75	= 2103.75
$5\frac{3}{4}$	2 × 750 = 1500	+ 431.25	= 1931.25
6	2 × 700 = 1400	+ 420	= 1820

Deducting from gross receipts the total expenses, we have the net profits:—

At Price	Gross receipts	minus expenses	equal net profits
\$5	\$5000	— \$2500	= \$2500
$5\frac{1}{4}$	4725	— 2272.50	= 2452.50
$5\frac{1}{2}$	4537.50	— 2103.75	= 2433.75
$5\frac{3}{4}$	4312.50	— 1931.25	= 2381.25
6	4200	— 1820	= 2380

tration, to the fact that cost changes with the amount produced. The error in the original calculation has been pointed out by several writers, for example, by Professor Ross in the *Annals of the American Academy of Political and Social Science*, iii, p. 460; by Knut Wicksell in his *Finanztheoretische Untersuchungen*, p. 14; by Professor Loria in his review of the work of Professor Graziani (who had accepted the argument of the first edition) in the *Giornale degli Economisti*, anno vii, p. 461; and finally by Professor Edgeworth in the *Economic Journal*, vii, p. 228. But some of them, like the writer last named, go too far in asserting that a tax on monopoly gross receipts *must* raise prices.

¹ Above, pp. 275, 276.

That is, the maximum monopoly-revenue will as before still be at price \$5.

It is, therefore, possible, in the case of a tax on gross receipts as well as in the case of a tax on each article sold, that the monopolist may prefer not to raise the price at all. Even if the price, however, is increased by reason of the tax, as will ordinarily be the case, the same distinction must be observed as that mentioned in the previous case of the taxation of gross product.¹ That is, since the great mass of monopolies are subject to the law of increasing returns, while the great mass of competitive industries obey the law of decreasing returns, and since the action of the law of increasing returns is to bring about a slighter degree of shifting in the case of monopoly than in that of competition, it follows that even if a tax on gross receipts induces the monopolist to raise the price by a part of the tax, the tendency will be for the producer to bear more of the burden himself than would have been the case had he been subject to competitive conditions.

3. *A Tax on Net Receipts or Profits*

In the case of a tax on the net profits of a monopolist, it might be assumed that the tax will always be shifted to the consumer because of his necessary dependence on the monopolist. This assumption, however, would be completely false. It makes no difference whether the monopolized commodity is one, the supply of which is strictly limited and which is not reproducible at all, or whether the commodity is reproducible according to the law of constant, diminishing or increasing returns. So far as the producer is concerned, he cannot add the tax to the price; for it may be assumed that the monopolist producer will always demand the highest price which the consumer is willing to give. If the consumers were willing to pay more, he would have increased the price before the imposition of the tax. In

¹ See above, page 274.

other words, since monopoly price is always at the point of greatest monopoly profits, a tax on these profits can never increase the price. A tax on monopoly profits must, therefore, fall wholly on the monopolist.

In the case of competitive net receipts, we must distinguish between an exclusive and a general tax on profits. A tax on the profits of some particular occupation must, in the long run, be shifted to the consumer, provided that the commodity continue to be produced at all. For if the tax rests on the particular profits, the producers will be put at a disadvantage as compared with those engaged in other industries. There will be a gradual migration of capital to find the most profitable level, and the original industry will gradually be deserted. In the long run, therefore, either the tax will be shifted to the consumer or it will lead to a cessation of production. In the one case, consumers suffer through increase of price; in the other case, they suffer through destruction of consumption. But in no case will the burden ultimately rest on the permanent producer.

We must, however, not forget the following important practical point, which seems to have been overlooked by many. To the extent that the theory of the mobility of capital is not applicable, "the long run" will not occur. When the fixed capital forms a large part, and the circulating capital a small part, of the entire investment, final equilibrium can be brought about only through the ruin and disappearance of the producer. Even where the capital is ultimately transferred, the intermediate effects are often the most important ones. What may be in a sense unimportant from the standpoint of national economy, may be supremely important from the standpoint of individual economy. When we say that taxes cannot, in the long run, remain on the producer, we generalize the conception. The producer merely represents a class of individuals who never disappear. But when we speak of the producers during any interval, we refer to certain individuals. The welfare of producers as a class is something very different from the

welfare of an actual producer. Producers as a class ultimately may contrive to obtain certain average returns; but this may be rendered possible only by the complete ruin of the individuals who are now engaged in production. So far as inequalities of taxation are not constant inequalities, this process will continually repeat itself. The optimistic theory is as much out of place here as it is in the other domains of economic science.¹ In other words, even an exclusive tax on profits may at any given time, under certain conditions, rest on the original taxpayer until he has been entirely driven out of the field. The only result of a tax on profits might then be completely to stop the production of the commodity or the continuance of the business. The consumer would then suffer not through the increase of price, but through the inability to procure the commodity at all.

A general or universal tax on profits, in the sense of a uniform tax on profits, does not, strictly speaking, exist any more than a general or uniform tax on all capital.² But a

¹ Cf. above, p. 230, the discussion of the incidence of the tax on the net profits of land. The qualification to the general doctrine as to the incidence of exclusive taxes is admirably expressed by Cliffe-Leslie in the following passage: "Another incidence of a number of taxes on the working classes as producers has been concealed by the doctrine that taxes on particular commodities and particular employments fall on consumers only, not on producers. The theory of taxation abounds in examples of the danger of the abstract and hypothetical method of reasoning in economics. The economist sets out with an assumption surrounded with conditions and qualifications, and perhaps itself open to question, such as that in the long run, and on the average, the profits of different occupations tend to equality, and presently forgetting all his qualifications and conditions, concludes that the profits of individuals must be equal; and therefore all special taxes advanced by producers must come back to them with equal or average profit. Individual profits really, in almost every business, vary from enormous gain to absolute loss. Mill says: 'That equal capitals give equal profits, as a general maxim of trade, would be as false as that equal age and size give equal bodily strength.' Nevertheless it is taken for granted that every special tax on a business is received 'with average profit,' though the net result of all a trader's advances is not unfrequently ruin; though all such taxes give an advantage to the larger capitalists. . . ." — "The Incidence of Imperial and Local Taxation on the Working Classes." In *Essays on Moral and Political Philosophy*, 1879, p. 196. In the 2d ed., under the title *Essays in Political Economy*, this passage is found on pp. 388, 389.

² See above, p. 262.

tax may practically affect so many classes of producers in a given community, and so many different kinds of profits more or less removed from liability to competition from foreign sources, that we are justified in setting up the conception of a general tax, in contrast with an exclusive tax, on profits. Such a general tax on net profits can never be shifted. If profits represent the surplus above cost of production, a general tax on this surplus cannot influence the cost of production. Price cannot be altered, and the interests of the consumer cannot be affected. It is the producer who bears the tax, both immediately and ultimately.

Some writers, indeed, like Cournot, have asserted that the ultimate effects on the consumer may be bad, because the tax restricts the producers' consumption, and because the employment of the proceeds of the tax is generally less profitable than if the proceeds had remained in the hands of the producer. But this reasoning seems to be defective. It takes for granted that taxes are used unproductively, and it leads logically to the aphorism of Say that the best taxation is that which is least in amount. So far as governmental expenditures are necessary and judicious, they are useful and productive; and it is not permissible to assume that private expenditure is more beneficial than public expenditure. Everything depends on the nature of the expenditure, and on the general views as to the duty and limits of governmental activity. To say that a tax on profits is injurious to the consumer seems to involve a begging of the question. The whole problem, moreover, is not peculiar to a tax on profits, nor is it any longer a problem of incidence: it belongs properly to the wider discussion of the general influence of taxation.

One practical inference from the above discussion may be used in connection with the controversy in the United States as to whether corporation taxes should be levied on gross or on net receipts. Whether these be monopolies or not, the *a priori* conclusion in favor of taxation of net receipts¹ is

¹ See Seligman, *Essays in Taxation*, pp. 198-205.

strengthened by the results of this discussion. In the particular case of transportation companies, for example, around which most of the wordy warfare and the practical contest have waged, it is more likely that the travellers and shippers will feel a tax on gross receipts than one on net receipts.

4. *A Tax of Fixed Amount*

It may happen that a tax is not assessed according to net profits, gross receipts or sales, but that it is imposed in the shape of a lump sum on all the producers in the industry. This is the common, although not the universal, rule with the American license taxes. No matter how large the profits, the tax remains the same.

In the case of a monopoly, such a tax necessarily falls on the monopoly profits. For the very same reasons that were advanced above, in the discussion of a tax on monopoly net receipts, the tax cannot be shifted. It is always the monopoly revenue that suffers.

In the case of competition, the tax of fixed amount is a condition precedent to production. It might be inferred that the tax would therefore be an addition to the necessary cost of production, which must be shifted to the consumer. But this is not the case; for such a tax is even more inimical to the small producer than a tax on gross product. As the large producer will pay absolutely no more than his small competitor, he will prefer, provided the commodities are reproducible to any extent, to assume the tax and to recoup himself by capturing the customers of the smaller dealer. The minor producer who is thus unable to add the tax to the price will be crowded out of existence. Thus the fixed license tax, when high enough to tempt the large dealer, tends to be borne by the producer — until, indeed, the gradual trend toward monopoly, fostered by the tax, may bring about a rise of price and thus affect the interests of the customer. Here again, however, it would be only indirectly the tax that would cause the rise of price. But it may

frequently happen that the price will not rise at all, the increased sales of the fewer producers compensating them for the tax which they pay. In such a case, the incidence of the tax may in a certain sense be declared to be neither on the consumers nor on the producers who continue to produce permanently after the imposition of the tax; for the whole tax may be discounted and borne by the unfortunate producers who are crowded out of existence. Thus the system of high liquor licenses does not necessarily result in any increased price to the consumer. Its effect may be a diminution of the saloons and the gradual monopolization of the trade in the hands of the wealthier individuals. The producer then always pays this tax; the consumer may or may not be affected ultimately.

Of course, when the so-called "license taxes" are not fixed in amount, but vary with gross receipts or gross produce or net profits, their incidence is governed by the rules laid down in the preceding paragraphs. The word "license" covers a multitude of very distinct taxes.

In summing up the preceding discussion, we come to the following conclusions: the incidence of a tax on monopoly revenue is always on the producer, except in the case where the tax is proportioned to the amount produced or sold, in which case the tax is ordinarily shifted in whole or in part, although even there, under certain conditions, the tax may remain on the monopolist producer; a general tax on competitive profits, whether fixed or proportional to net receipts, rests on the producer; a special tax on competitive net receipts is ordinarily shifted to the consumer; and a roundabout tax on competitive profits, in the shape of a tax on gross receipts or gross produce, may or may not be shifted to the consumer—with the probability that, in the great majority of cases, the whole, or almost the whole, of the tax will be so shifted.

This conclusion may not be satisfactory to the sticklers for over-precision or for "natural laws" of incidence. But it

will be sufficient to show the delicacy of the problem, and to prove how superficial is the optimistic or general diffusion theory.

If we wish to draw any inferences as to some existing problems in the United States, they may be summarized as follows:—

(1) The so-called “business” taxes are not necessarily any more “direct” taxes than are the national internal revenue taxes.

(2) Taxes on pure monopolies should not be levied on gross product or on gross receipts if it is desired that they should remain on the monopoly.

(3) Taxes on corporations should be levied on net receipts rather than on gross receipts or on other elements, if it is not intended that the taxes should be shifted to the community.

(4) Business taxes in general, including the so-called license taxes, should be levied according to net receipts. The so-called license taxes, when of fixed amount, further the trend toward monopoly; and when graduated according to sales tend to be shifted to the consumer.

(5) Excise or internal revenue taxes, when levied on gross product, are apt to be shifted to the consumer. But the degree to which they will be shifted depends chiefly on three points: (a) whether the business is of a monopolistic or of a competitive nature; (b) whether the elasticity of demand is great or small; and (c) whether the relation of product to cost is constant or not. There is always a possibility that a portion of the tax may rest on the producer.

The application of the general principles of the taxation of profits to land, houses, debts and mortgages has already been made in preceding chapters, and needs no further discussion.

CHAPTER VI

TAXES ON WAGES

It has been customary, since the time of Adam Smith, to make a distinction between the wages of ordinary labor and what he calls "the recompense of ingenious artists and men of liberal professions." Let us, then, first take up the incidence of a tax on the latter class.

Adam Smith maintained that a tax on such skilled employments would be shifted, because this recompense "necessarily keeps a certain proportion to the emoluments of inferior trades."¹ Unless their recompense increased by the amount of the tax, these professions, "being no longer on a level with other trades, would be so much deserted that they would soon return to that level." On the other hand, John Stuart Mill maintained that all the skilled and privileged employments are taken out of the sphere of competition by a natural or conferred monopoly, and that a tax will always fall on them, because they have no means of relieving themselves at the expense of any other class.² Which of these two statements is correct?

It would seem that in the main Mill is right, although his reasons are not entirely above criticism. It is true that the earnings of professionals are in general regulated by custom rather than by competition. For a large class, moreover, the superior earnings must be regarded in the light of what Marshall terms quasi-rents. A great tenor, an eminent surgeon or a famous lawyer, for example, will not receive more for their services, if a tax be imposed on the class to which they belong. To them a tax simply means a burden which cannot

¹ Cf. above, p. 115.

² Mill, *Principles*, book v, chap. iii, § 4.

be shifted. If the tax had not been imposed, their earnings would have been the same. Moreover, the whole class of professional workers is in many respects subject to influences of a more or less uneconomic kind. Their motives are frequently not pecuniary, but rather of a higher nature. An actor, a painter, a doctor, a lawyer, often adopts his profession with other objects in view than simply making his living or obtaining the greatest possible income. It is not long since the recompense to certain professional classes, like doctors, was regarded as a gratuity, not as a legally enforceable due. Even if we regard these classes from the purely economic standpoint, we cannot say that their recompense bears any necessary proportion to common wages. The earnings of the liberal professions are not dependent on cost of production. It is only by a perversion of words and of facts that we can consider the time and efforts spent in educating a member of a profession as a capital which must earn interest. In fact, the present alleged overfilling of the professions is due not so much to the hope of greater earnings as to the compulsory education and general social conditions of modern times. The forces which keep the price of labor in general at a certain level do not operate with equal effect in this field. The price of labor in professional occupations, in short, is not competitive, but is either customary or monopolistic.

Salaried public officials belong to a similar category; for governmental salaries depend primarily on the relative desirability of governmental service, and on considerations of imagined political expediency. They may be highest in countries where the usual level of wages is lowest. Even if this were not so, it would be hard to say on whom a tax on official salaries could be shifted. Surely not on the government, because it does not enter the market as a producer; nor does it follow ordinary commercial principles. If the tax be sufficiently high to render the position undesirable, it may result in less efficient, and therefore in the long run more expensive, work. The community at large will suffer

from a poor civil service. But the tax, as such, cannot be shifted.

When, however, we come to the ordinary wages of the common artisan, whether skilled or unskilled, the matter is not so simple. We have seen that the older theory maintains that a direct tax on wages falls on profits, because wages are necessarily fixed by the cost of living, or the standard of life. But, in the course of our sketch of the history of the doctrine, we learned some of the objections made to this theory. These may be summed up as follows:—

(1) It is assumed that laborers will not consent to accept a reduction in their standard of life. This, however, is largely a question of power between the wage-earner and the employer. It is impossible to say in advance who will win. If wages were actually fixed by the bare minimum of subsistence, then, indeed, a tax on wages would necessarily be shifted. Although Ricardo was not, properly speaking, a believer in the iron law of wages, he makes use of this very argument to prove his point. The fact is that wages are never at this point of bare subsistence: the standard of life is always above this limit. Between this limit and the actual standard of wages there is a margin on which a tax may encroach. An irruption of low-priced immigrants, other things being equal, will inevitably lower the standard of life and the general rate of wages. So also a tax on wages which will, at first at all events, fall on the laborer, may equally well lower his standard of life, by making it impossible for him to procure the conveniences to which he has been accustomed. The wage-earner will, of course, strive to reimburse himself by demanding higher wages; but there is no reason why the employer should be compelled to acquiesce. If that were true, no reduction of wages would ever be possible, because a reduction of wages always implies a lowering of the standard of life. Whether or not a tax on wages will be shifted on profits, even in the long run, depends entirely on the relative strength of the labor organizations and on other

conditions which may compel the employer to pay an increase of wages equivalent to the amount of the tax. Whenever such conditions are not present—and they are frequently absent—the tax will rest on the wage-earner, and trench on the margin above the bare rate of subsistence, thus keeping down the standard of life.

(2) Even granting that a tax on wages may in the long run, under favorable conditions, be shifted to profits, in the interval the burden will be borne by the laborer. It is a well-known fact that in a general rise of prices the price of labor is always the last to respond to the general impulse. This interval, however, may become more or less permanent. The longer the delay, the more severe is the suffering that ensues, and the greater the prospect that the temporary diminution of the consumers' effective demand will be converted into a reduction of the laborers' standard of life.

The taxation of labor results in a vicious circle. The weaker the workman, or the lower his general standard of life, the less able is he to resist the attempts of the employers to reduce his wages to the barest minimum. The higher his wages, the more effective is his power of resistance and compulsion, and the more likely is he to secure a gradual continual advance of wages. The imposition of a tax on wages thus injures the workman both temporarily and permanently. It reduces his standard of life, and, in weakening him, it renders less easy any future attempt to lift himself out of his impoverished condition. If a tax on wages is shifted to profits at all, it is only after a long and fierce struggle, during which the laborer may suffer materially, and as a result of which his whole *morale* may be lowered. Here again there is no place for either optimism or absolutism of theory.

CHAPTER VII

OTHER TAXES

THE application of the principles which govern the incidence of taxation to the other taxes that have not yet been treated calls for but little discussion. The most important of the remaining taxes are as follows:—

1. *Poll Taxes*

A poll or capitation tax is clearly not susceptible of being shifted, except to the extent that it falls on the laborer. Even then, it must trench upon the margin between the cost of subsistence and his actual standard of life before the conditions under which the shifting may take place will be present. The possibility of shifting, moreover, as has already been indicated, is not by any means the same thing as the actual shifting itself.

2. *Inheritance Taxes*

A tax on inheritances or bequests cannot be shifted, for evidently there is no one to whom it could be transferred. The ulterior effects of which some writers speak, such as the influence of inheritance taxes on the accumulation of capital, do not really illustrate the process of shifting. They are, moreover, of such doubtful validity that they may be neglected.¹

¹ Professor Bastable (*Public Finance*, 2d ed., p. 563), for example, bases his criticism on Ricardo's view that such taxes fall on capital, and thinks that the whole society will as a result suffer from less efficient production. For a criticism of this position, see West, *The Inheritance Tax*, 1895, pp. 119-122.

3. *Excises*

An excise or internal revenue tax may or may not be shifted. It is virtually one form of the profits tax discussed above. The problem depends for its solution on the consideration of all the complicated points referred to there.¹ It may be said, however, that in the majority of cases such a tax tends to be shifted in whole or in greater part.

Much the same may be said of an import duty. As a general rule, this tax will be partially or completely shifted; but the exact result will depend on the particular conditions of the individual cases in question. The application of the general principles of incidence to customs duties is so important as to warrant a somewhat more extended discussion.

4. *Import and Export Duties*

The theory of international value, as it has been successfully developed by the classical economists, is nothing but an application, although an exceedingly complicated one, of the general law of value.² The elements that enter into the equation of international demand are so numerous and so complex that an investigation of the actual effects of a tax upon any one class of commodities would require for its proper solution not only an acquaintance with the details of the theory itself, but also an intimate knowledge of all the forces influencing the supply of, and the demand for, the commodities affected in the two countries immediately concerned as well as in all the other countries that constitute

¹ Above, pp. 270-294.

² The most successful restatements of the theory by modern authors are to be found in Bastable, *The Theory of International Trade, with Some of its Applications to Economic Policy*, 2d ed., 1897, and Edgeworth, "The Theory of International Values," a series of articles in the *Economic Journal*, iv (1894), pp. 35-50, 424-443, 606-638. The particular question of the shifting of a tariff tax was treated by Professor Bastable in his "Incidence and Effects of Import and Export Duties," in the *Report of the British Association for 1889*, pp. 440 *et seq.*

the world market.¹ Among the considerations affecting the problem of the incidence of a tax on imports or exports, the following are the more important:—

(1) To what extent does the exporting country control the supply of the commodity? (2) To what extent does the importing country constitute the sole market for the commodity? (3) To what extent can the commodity in question be produced at home? (4) What is the ratio of product to cost? (5) To what extent is the demand elastic?

Let us take up first the questions connected with an import duty. The imposition of the tax may be considered, in ordinary cases, as an addition to the cost of production, and as such increases the price of the article in the importing country by the amount of the duty. Under such conditions it is true that "a tariff is a tax," and that it falls on the consumer. This conclusion is based on the assumption that the producers do not bear any of the tax; that, although the sales necessarily fall off more or less, according as the demand is sensitive or not, by reason of the increased price, the producers find an outlet for their goods in some other country, so as to recompense them for the partial loss of the market in the country which imposes the tax.

This assumption, however, is not always correct. It may happen that the importing country constitutes either the sole market for the commodity, or such an important part of the market that the producer finds it impossible or difficult to extend his sales in other countries. To the extent that this is true, the producer finds it to his interest to avoid any substantial diminution of the demand in his chief market. This can be accomplished, however, only by his consenting to bear a portion of the tax himself. The case that is most favorable

¹ As against those who expect a precise answer to every practical problem of the effect of a tariff, the statement of Professor Nicholson seems almost justifiable, that in many cases "the only answer is that an answer is impossible." In another place he says that "the incidence of import and export duties, especially when the indirect effects are considered, is the most complicated and difficult problem in economics."—"Tariffs and International Commerce." By J. S. Nicholson. In the *Scottish Geographical Magazine*, September, 1891.

to the consumer in the importing country is: first, that the importing country constitutes the sole market for the commodity; and, second, that the demand for the commodity is so very elastic that a slight increase of price causes a very great diminution in the sales. But from this very exceptional case, where the producer tends to bear a large share of the tax, down to the ordinary case, where the consumer bears the whole of the tax, there are all kinds of gradations.

Another very important element in the problem is the extent to which the home production in the importing country may fill the gap caused by the diminution in the imports from the exporting country. The ordinary reasoning that "a tariff is a tax" is based on the assumption, as we have seen, that the equilibrium will be reached when the decreased supply from the foreign country sells at the increased price. If the home country cannot produce the article at all—that is, if the exporting country has a monopoly of the supply—this assumption is valid. But if the home country has hitherto been prevented from producing the article solely because the price has been too low to admit of profits, the degree to which home production can round out the supply depends entirely on the extent to which the price rises. Suppose that an imported commodity can be produced abroad so as to sell in the importing country at \$10.00, while it can be produced in the importing country only at \$12.50. If a tax of \$2.00 per unit is imposed, other things being assumed as equal, the price will rise to \$12.00, and the demand will fall off. But suppose that the importing country can now furnish a part of the supply, and because of the larger output will be able to produce with profit at \$11.00. Notwithstanding the tax of \$2.00, the price cannot rise above \$11.00, the demand will not fall off as much as before, and the tax will be divided between the foreign producer and the home consumer. The extent to which the home producer can capture a part of the market depends, among other things, upon the ratio of product to cost. If the commodity is produced at home under the law of increasing cost, which as we have seen is the usual case in competitive

industries, the chance of the home producer is not so good; if under the law of decreasing cost, which as we know implies a trend toward monopoly, his chances are better. But it is obvious that cases may arise where it is not true that "the tariff is a tax" in the sense that the whole burden of an import duty is necessarily borne by the consumer.¹

The indirect effects of an import duty are interesting, but lie beyond the scope of this inquiry. From the point of view of revenue, it is clear that the greater the supply that is captured by the home producer, the less will be the proceeds of the tax. If the foreign producer is entirely shut out, the revenue will be zero. The amount of the immediate loss to the community in general will thus depend on the price at which the home producer can afford to sell. If, in the extreme case mentioned, the home producer supplies the entire market at a price of \$12.00, the government loses its whole revenue from the tax, and the consumers lose the entire amount of the tax through the increase of price. If, on the other hand, the price of the home product after the shutting out of foreign competition and the development of improved processes at home can be finally brought down to a point lower than \$10.00, the revenue will indeed still be zero, but the consumers will lose nothing, and the community will have gained the advantages resulting from an increase of industry. This, however, brings us at once to the controversy between free trade and protection — a controversy that can be settled only by considering the wider and more permanent results of an international industrial policy. What concern us here are the immediate results, or the actual incidence of an import duty.

In the case of an export duty, much the same conclusions

¹ This is now recognized by the foremost writers on the subject. Cf. the quotations in Professor Edgeworth's article in the *Economic Journal*, iv, p. 43, and his own statements, *ibid.*, pp. 46-48. The conclusions to which Professor Carver comes in his article on "The Shifting of Taxes" in the *Yale Review*, v, p. 271, are therefore really not "opposed to the orthodox teachings" on the subject, as he assumes, if by orthodoxy we mean the views commonly held to be authoritative.

can be reached. An export duty ordinarily falls on the citizen of the exporting country. But if the duty is imposed on a commodity of which the country has a monopoly, and still more if the demand for this monopolized commodity is comparatively persistent, it may happen that an export tax will be shifted to the foreign consumer. It is noteworthy that the chief examples of export duties still to be found are those of duties on articles which approach the conditions of monopoly supply. Such are, for example, the export duties on opium in India and on guano in Peru. But it is to be observed that the cases of perfectly stable demand, even for a monopolized article, are exceedingly rare.¹ There is scarcely any commodity for which some substitute, even though it be incomplete, cannot be found. To the extent that this is true, more and more of the export duty will be borne by the monopolist exporter for fear that the decrease of sales, even at a higher price, will lower his maximum monopoly revenue.

5. *Stamp Taxes*

Stamp taxes are usually supposed to be shifted to the consumer or purchaser. This does not, however, necessarily follow. If the stamp taxes are imposed on the sale of particular commodities — as, for instance, the American internal revenue duty on proprietary medicines — we are confronted by what is an ordinary form of the taxation of profits discussed above. This is equally true when the so-called stamp taxes are nothing but taxes on production, levied by means of a stamp, as in the American taxes on tobacco, whiskey and beer. Stamp taxes here do not really form a distinct kind of taxes.

If the stamp taxes are, however, taxes on transportation and communication, much again will depend on the height of the tax, the character of the business and the elasticity of the demand. For instance, in the case of the American war revenue taxes of 1898, the one cent tax on telegraph messages and on express receipts has been shifted to the consumer,

¹ See above, pp. 189-191.

partly because the tax was high enough, from the standpoint of the telegraph and express companies, to warrant an attempt to throw it on the sender of the message or parcel, and partly because the tax was at the same time so low that the consumer did not care to abandon the use of those particular media of communication and transportation. The telegraph is used in America almost exclusively for purposes of business; and the service may to a large extent be classed as a necessary, with comparative inelasticity of demand. The express companies, moreover, even in that part of their transaction where they come into competition with the postal service, do not run much risk of reducing their business by adding the tax to the price.

On the other hand, the one cent tax on parlor car tickets has been borne by the transportation companies, partly because of their fear of losing their patronage, partly because the tax constitutes a less important percentage of the price than in the preceding cases. From the consumer's standpoint, in the case of a moderate comfort like the parlor car service, even a slight addition to price may mean a considerable diminution of demand for the service. From the producer's standpoint, one cent on a sum ranging from two to four dollars (the average price of a parlor car ticket) is of considerably less consequence than one cent on a sum ranging from twenty-five to forty cents (the average price of a telegraph message or express shipment). Even here, however, it is open to question whether the conditions of comparative elasticity of demand and supply will not change to such an extent as to cause the tax on parlor car tickets to be shifted to the consumer, just as the ordinary tax on railroad tickets in the continental countries of Europe is also borne by the passenger.

Finally, when a substantial tax is imposed on an act of communication or of transportation, where the demand is sensitive, the tax may, in rare instances, seem to have the very exceptional result of lowering prices. When the United States, for instance, imposed, in 1898, a one cent tax on ordi-

nary fifteen cent telephone messages, the telephone companies were so apprehensive of diminishing their maximum monopoly revenue, that they not only decided to refrain from adding the tax to the price, but also resolved to evade the tax entirely by reducing telephone messages to a price below fifteen cents. Ordinarily, however, a monopoly like the telephone company would be presumed to have realized its maximum advantage at the price current before the imposition of the tax. The tax may, indeed, in this particular case, have led the company to consider the whole matter anew; but, after all, the reduction of the price would have ultimately come about, tax or no tax. The tax, therefore, was the occasion, rather than the cause, of lower prices.

When the stamp taxes are taxes on acts or transactions, the incidence will depend on whether these transactions are of a commercial character. In the case of judicial taxes, sometimes termed court costs and fees, there is evidently no one to whom the taxpayer can shift the burden. In the case of ordinary commercial transactions, the important considerations, again, will be the height of the tax and the elasticity of the demand. When the tax is very insignificant, as in the case of a tax on the ordinary receipts of sales, the merchant is very apt to bear the tax himself. When the tax is sufficiently large to make it an inducement to the seller to shift the burden, the tax, if imposed on him, will usually be shifted to the buyer, except to the extent that this shifting will diminish the number of transactions and thus induce the seller to bear a part of the burden himself. In such cases, the burden is apt to be divided in accordance with the relative elasticity of demand and supply. The net result may then be a diminution of transactions. The chief reason, for example, why there exists in the French cities no such important class of real estate brokers and speculative builders as in the American cities, is to be found in the high French taxes on transfers of land. Finally, when the stamp taxes are imposed on the transfers of capital, as between lender and borrower, it is clear that the tax will be largely borne by

the borrower, in accordance with the principles laid down above.

6. *Income Taxes*

The incidence of an income tax has been much discussed. One writer has even attempted to prove that an equal tax on incomes is the only tax that cannot be shifted.¹ He draws the conclusion that the income tax must therefore be the ideal—the only possible realization of the principle of equality of taxation. This contention, however, is open to criticism for two reasons. In the first place, we have seen that there are many other taxes which cannot be shifted—like the poll tax, taxes on inheritances, on rent, on salaries, and certain taxes on monopolies. Secondly, and more important, it is untrue that the income tax, as frequently levied, cannot be shifted.

In some countries, as in England, the income tax is simply a combination of taxes on the separate ingredients of income, and it often happens that the so-called income tax is, in reality, a system of taxes on gross revenue or gross receipts. In such cases there can be no question that each part of the income tax follows the laws of incidence of the respective separate taxes, so that there is, in respect of incidence, practically no difference between a so-called income tax and the other direct taxes of which the income tax is substantially composed. If the total income is composed of wages, the law of incidence cannot be different, whether we call the share income or wages. If the total income is composed of profits in the broad sense, the tax will be shifted or not, according to the rules of incidence that govern a tax on profits. If the income is derived from house rents, the final burden will be borne in accordance with the principles laid down in discussing the tax on real estate. If some of the separate parts are shifted, the whole cannot possibly remain unshifted.

In those cases, indeed, where the tax is levied on pure income in the strict economic sense, the tax is substantially

¹ Kaizl, *Die Lehre von der Ueberwälzung der Steuern*, pp. 101-118.

a tax on economic rent, plus a tax on net profits, plus a tax on wages. Now, the tax on economic rent and on net profits cannot be shifted; and, therefore, as regards all members of the community except the wage-earners, a tax levied on pure income tends to stay where it is imposed. So far as the lowest incomes are exempted from the tax, the tendency would also be for the income tax on the laborers to stay where it is put. But, even in such cases, there is no absolute certainty that the income tax will not be shifted. In actual life, of course, as we very rarely find either a pure income tax or an equal income tax, we cannot safely rely on the complete non-transferability of the tax. Nevertheless, to the extent that the tax may be considered one on surplus, rather than on margin, the chances are that the tax will remain where it is originally placed.

This entire question, however, like that of the incidence of stamp duties and taxes on exchange, as well as the wider problem of the shifting of all taxes from the consumer onward, practically resolves itself into the old problem whether a tax is to be regarded as a cost of production or an outlay for consumption.

In all the cases that we have thus far discussed we have traced the shifting of taxes down to the consumer. Certain taxes, we have found, are never shifted; other taxes are sometimes shifted in whole or in part to the consumer. But will not the consumer in turn shift the burden to some one else? Here we must remember the theory of Canard, Thiers and Stein, that every tax is shifted on everybody—that every consumer will again shift the tax on a third party, and that this third party who is again a consumer will shift it to some one else and so on *ad infinitum*. Since every one is a consumer, every one will thus bear a portion of the taxes that everybody else pays.

The error of this doctrine lies in the failure to distinguish between productive and unproductive consumption. If every taxpayer were engaged in production and paid taxes only on what he employed for the purposes of further production,

there might be some truth in the foregoing doctrine. Many taxes fall on individuals who are not producers at all, so that there is no question of any shifting to the consumer, while each consumer uses only a part of the commodities consumed by him for productive purposes. Every one consumes unproductively. Whatever an individual spends on luxuries, or on anything but necessities, is an expenditure which, so far as he is concerned, does not give rise to any further relations of producer and consumer. If the consumer, on whom a certain tax has been shifted, spends his income in buying diamonds, on whom can he possibly shift the tax? Not on the diamond dealer, because he does not stand in any relation of producer to the dealer. He may indeed buy fewer diamonds than he would have bought if the tax had not been imposed, but he cannot shift the tax. The shifting of the tax is not the same thing as the result of the tax. What is true of the diamond purchaser is true of all who consume for purposes other than those of production. So that there is no indefinite diffusion of taxes.

Only so far as the individual purchases or consumes a commodity in order to produce other commodities with it, will the condition arise under which he as producer will be able to shift the tax proper on to another consumer. Here, again, the possible conditions are not necessarily the actual facts. Just as only some producers—and even they only under certain circumstances—will be able to shift the tax, so only some of the consumers (who must in this respect be regarded as producers)—and they only in part—will be able to shift the tax. Hence the theory of the general diffusion of taxation is untenable, whether the theory asserts that all taxes are equally spread throughout the community, or that they will inevitably rest at last on some one class.

CHAPTER VIII

CONCLUSION

WE come now to the close of our investigation, and to the consideration of the question whether the theory of incidence contains by inference any advice for the statesman engaged in framing a scheme of taxation. What is the practical result of our discussion? What weight should be attached to theories of incidence in constructing a positive system of public contributions?

In the first place, we have seen that there is no room for optimism of theory. The legislator cannot rightfully shut his ears to any cry for reform, on the plea that all old taxes tend to become good taxes. Nor dare he complacently grasp any new source of revenue, on the assumption that all taxes, no matter how levied, will ultimately be borne by the community at large. The theory that "all taxes fall on everybody" and are therefore just, is incorrect because it assumes that all taxes are a part of the cost of production. This assumption is untrue, because some taxes are levied on persons, or property, or revenue, where there is no further relation of producer and consumer. Even if all taxes were to be regarded as additions to the cost of production, it would not follow that the taxes would be shifted to the consumers in any definite proportion to their faculty or ability to pay, which is the only test of justice in taxation. If all taxes did really fall on everybody, taxation would be proportional to expenditure; and expenditure is, of all bases of taxation, the least equitable. Thus the optimistic theory must be discarded: first, because the general diffusion doctrine is untrue; and, second, because if it were true, it would cause

injustice. The legislator cannot shirk his duty in this easy-going way.

On the other hand, there is no good reason for pessimism or agnosticism. Some writers, as we know, claim that it is useless to construct any system of taxation, because it is impossible to foresee the ultimate consequences of any tax. But this hopeless attitude we have found to be mistaken. It is true, indeed, that the distinction between direct and indirect taxes is robbed of much of its value; for many of the so-called direct taxes may be shifted in the same way as the so-called indirect taxes. In common parlance the distinction between direct and indirect taxes is practically relegated to the mind of the legislator: what he wishes to have borne by the original taxpayer is called a direct tax, what he intends to have borne by some one else than the original taxpayer is called indirect. Unfortunately the intention of the legislator is not identical with the actual result. We must, then, either revise our nomenclature or declare the present distinction of little value.

While the mere fact that a tax is called a direct tax does not show that it may not be shifted, the preceding discussion has shown that certain general tendencies may be clearly defined. What are these general tendencies of incidence? They may be summed up under four heads.

In the first place all taxable objects may be looked at from the standpoint of property or from that of revenue. Regarded from the former point of view, we have found that unequal or partial taxes on revenue-yielding property tend to be a charge neither on the community nor on the future possessors, but only on the holders at the time the tax is imposed. The capitalization theory comes into play whenever a new tax is assessed on certain classes of property or the rate of an existing tax is altered. The tax is never shifted onward, but its results are serious, whether for good or for evil, to the class of initial owners alone. The lesson which the capitalization theory has to teach is that the evils of inequality of taxation are doubly intensified when the

inequality attaches to revenue-yielding property, and that the ultimate equalization of the burden, if it come at all, can be attained only at the expense of the unfortunate present holders.

Secondly, if we look at taxable objects from the standpoint of revenue, we have found that there are only two kinds of revenue on which a tax, when once imposed, necessarily remains. These are economic rent and pure profits, or, to use a term which has sometimes been adopted to include both elements, economic surplus. A tax on surplus can never be shifted, because surplus is not a part of cost of production, but the result of process of production. Thus, taxes on inheritance, gifts, gains from speculation, etc., cannot be shifted, because they are a part of surplus, of pure profits. If it were possible, then, to find a class whose revenue consisted exclusively of economic rent and pure profits, the legislator might single out this class either for taxation or for exemption, according as it was the general policy to have taxes paid directly or indirectly.

In the third place, all remaining taxes tend, in the abstract, to be shifted, until they fall ultimately on this surplus, because all other taxes tend to form a part of cost of production. The conclusion might, therefore, be drawn, that taxes should be levied either on net profits alone or on commodities — in the latter case, falling in the long run on profits, but without the knowledge of the profit-receiver. In either case, taxes on wages would be regarded as part of the cost of production, and would be shifted from wages to profits.

Such conclusions rest on doctrines very like those that we discussed under the head of "absolute theories." They tend to be true only in an isolated community where there is complete mobility of labor and capital, and where the economic man reigns supreme. In actual life, these tendencies are met by the counter tendencies of "economic friction." Taxes on land often tend to stay where they are put, because of international relations and the lack of absolute transferability of capital; taxes on wages, if cunningly im-

posed, may lead to a lowering, instead of to a heightening, of the standard of life; taxes on occupiers of houses are not necessarily shifted to the owners; and so on.

Fourthly, above all, we must distinguish between kinds of revenue and classes of society. Economic surplus, pure rent and pure profit may mean the entire revenue of some individuals, but only part of the revenue of others. As we have already pointed out, the mere fact that a tax may be shifted by a class does not show that the tax may not press very unequally upon individual members of the class. If we thus change the point of view from social classes to individuals, we see how untenable is the argument that the best tax is an indirect tax, because it will ultimately be shifted to the economic surplus of society. For such a tax can get to economic surplus only through the productive consumption of individuals—that is, through expenditures which again create relations of producer and consumer. But as we have just pointed out, not all consumption is productive consumption; and expenditure in general is the least equitable basis of taxation, because it always bears with greater weight upon the less fortunate or more deserving members of any social class.

The advice, therefore, which the correct theory of incidence has to offer to the legislator is: Choose primarily those taxes the results of which can be foretold with some degree of accuracy; at all events, take some taxes where the chances of shifting are very slight, and take, on the other hand, taxes which will be shifted in their entirety. In the former class are included certain taxes on monopolies, net profits, inheritances and definite forms of property and income. In the latter class are included taxes on commodities in the shape of import duties, certain excise taxes and licenses, and taxes on gross receipts of corporations. If the legislator desires to reach certain classes of society directly, let him choose the first kind of taxes; if he desires to have his taxes paid unawares, let him choose the second. If neither the one nor the other kind of taxes suffices for the public revenue, the legis-

lator will be compelled, as is often the case, to resort to taxes, the incidence of which is more uncertain, and where the intentions of the legislator may be entirely frustrated by the actual course of events.

The theory of incidence has therefore important, but by no means final, advice to offer in the elaboration of a tax system. It does not by any means render unnecessary the study of the principles of justice and equality in taxation. If neither the optimistic, nor the pessimistic, nor the agnostic theory of incidence can be any longer upheld, the student of public finance must seek to elaborate the rules of equitable taxation without any reliance upon the automatic operation of presumed absolute laws. He must endeavor to make a choice of public revenues which in themselves satisfy the requirement of the principles of economic justice; and in so doing he may be guided by those principles of incidence, but only by those, which are definite and well ascertained. The theory of shifting of taxation is, therefore, an aid to, but not a substitute for, the study of economic justice. As has been well said, the doctrine of incidence is neither the archangel nor the archfiend of the science of finance.

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